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1997 GUIDE TO UTILITY RADIO STATIONS

edition 15

includes edition 23 of the

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Cross reference

- The extensive frequency list from chapter 3 is available on our **SUPER FREQUENCY LIST ON CD-ROM** as well, with five search fields for frequency, call sign, station, country and details, plus excellent browse and sort features. It also includes the world's first really comprehensive broadcast database on CD-ROM with all clandestine, domestic, and international radio stations compiled by renowned expert Michiel Schaay from the Netherlands.
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- This reference book includes many RTTY stations using Arabic, ATU-80 Arabic, Cyrillic, third-shift Cyrillic and Greek teleprinter alphabets, stations using F7B and VFT modulation, and stations using ACARS, ALIS, ALIS-2, ARQ-E, ARQ-E3, ARQ-M, ARQ-N, ARQ6, AUTOSPEC, CIS-11, CIS-14, Clover, DUP-ARQ, DUP-ARQ-2, FEC-A, G-TOR, HC-ARQ, HNG-FEC, IRA-ARQ, MFSK (Coquelet/Piccolo), NAVTEX, Packet Radio, PACTOR, POL-ARQ, RUM-FEC, SI-ARQ, SI-FEC, SITOR, SWED-ARQ, T-PLEX and TWINPLEX synchronous teleprinter systems. Detailed information on such alphabets and techniques is included in our **RADIO DATA CODE MANUAL.**
- The FAX technique used by terrestrial stations and meteo satellites is explained in our **GUIDE TO WORLDWIDE WEATHERFAX SERVICES**. It includes dozens of radiofax stations, weatherfax services, and Internet locations of meteo data, satellite images, weather charts, and the like.
- Examples on various types of emissions including ACARS, AIRCALL, ALIS, Arabic, ARQ-E, ARQ-E3, ARQ-M, ARQ-N, ARQ6, ATU-80 Arabic, AUTOSPEC, Baudot, CIS-11, Clover, Coquelet, DUP-ARQ, FAX, FEC-A, F7B, GOLAY, HC-ARQ, Hellschreiber, HNG-FEC, IRA, ITA2, MCVFT, MFSK, NATO Link4, NATO Link11, NATO Mil188, Packet Radio, PACTOR, POCSAG, POL-ARQ, QAM, RUM-FEC, SI-ARQ, SI-FEC, SITOR, SPREAD, SWED-ARQ, third-shift Cyrillic, TWINPLEX and VFT are filed on the **COMPACT CASSETTE RECORDING OF MODULATION TYPES** and on our **DOUBLE CD RECORDING OF MODULATION TYPES.**
- The famous **PASSPORT TO WORLD BAND RADIO** - published in the United States of America - includes many interesting feature articles for broadcast listeners, plus the excellent Larry Magne equipment tests. Available from Klingenfuss Publications.

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Cover photograph Meteorological Station Pointe Venus near Port Mathurin, Rodrigues, in the Indian Ocean. The station transmits on 3650 5820 8233 10100 12433 kHz; Pointe Corail Airfield is on 5731 8028 kHz. We visited the station and radar-tracked an upper-air balloon radiosonde launch at synoptic time 1200 UTC only four days before heavy tropical cyclone *Hansella* devastated the island on 05 to 07 APR 1996 - see the report on pages 438 - 441! This picture was taken during our 1996 monitoring mission in Mauritius and Rodrigues.

The Klingenfuss Archives F.CMJP ☺

1 General

The golden age of shortwave radio began during the thirties. It ended about 25 years ago when satellite communication started its triumphant advance as the dominant medium for long-distance communication. Actually, *traditional* shortwave radio, with a trained radio operator mysteriously tuning dozens of knobs to establish a complicated, slow and unreliable connection, is virtually dead.

Today we are witness of the fascinating rise of *modern* shortwave communication. Year after year, hundreds of new stations start operating on shortwave, and thousands of new frequencies are continuously monitored, identified and published by Klingenfuss. State-of-the-art shortwave radiocommunication systems benefit from

- low prime cost, neglectable operating cost - unbeatable for price;
- reliable connection setup in time of crisis;
- redundant supplementation to other communication systems;
- low requirements to infrastructure e.g. in disaster operation;
- simple antenna arrangements;
- possibility of mobile operation;
- economic, political and technological independence of the user from satellites, relay stations and public or private communication networks.

Fully automated radiocommunication procedures are already quite common. Simple and cheap propagation prognosis software defines for each connection a pool of operation channels within the usable frequency band limited by the lowest usable frequency (LUF) and the maximum usable frequency (MUF). Automatic link set-up systems select the optimal channel in milliseconds. Such adaptive radiocommunication is very reliable, robust, cost-effective and easy-to-use. Engineering progress in digital signal processing performs miracles e.g. with noise reduction. New modulation systems allow digital data transmissions on shortwave with data rates of 2400 Baud and beyond for encrypted speech, e-mail, compressed fax, and PC file transfer. Future developments will introduce X.400 protocol applications for the construction of global data communication networks where several or all participants are connected by shortwave (without realizing it!) or for economic back-up of satellite and wire circuits. In the long term, shortwave is the most cost-effective worldwide transmission medium.

An advanced generation of general coverage receivers such as the DRAKE R8 and the JRC NRD535, combined with sophisticated fax converters and data decoders such as the UNIVERSAL M8000 and the WAVECOM W41PC·DSP and W4100DSP, now make quasi-professional monitoring of utility stations easily accessible to everyone.

This revolutionary development has been supported by our famous lists and manuals since 1971. Being ourselves the top address for the world's top radio monitors since then, the correspondence with our worldwide reading public ensures the manual in hand to continue to be the standard reference of both professional monitoring services and non-professional radio listeners. The contents are built exclusively on continuous monitoring of the radio spectrum during 1996.

The global coverage of our data bank is secured by regular overseas monitoring missions. After extremely successful operations during the eighties and early nineties in Alaska, Azores, Brunei, Canada, Djibouti, Dominica, Guadeloupe, Guatemala, Indonesia, Madagascar, Malaysia, Martinique, Mauritius, Philippines, Reunion, Rodrigues, Sabah, Saint Lucia, Sarawak, Singapore, Somalia, Venezuela, and Yemen, we now in 1996 spent again more than two months in Brunei, Malaysia, Mauritius, Rodrigues and Singapore. The results are included in this book, and similar activities from even more exotic sites are scheduled for 1997. Recent events such as the revolution in Eastern Europe and Central Asia, the Balkan and Gulf Wars, and the ICRC and UNO missions in various parts of the world, have again confirmed nothing but our working methods to be effective.

Recently, prices have fallen to the point where a vast amount of computer power can be placed cheaply on every desk. We have taken the lead in the production of frequency data on electronic media: our new **SUPER FREQUENCY LIST ON CD-ROM** - already in its third edition! - developed into an immediate bestseller and already constitutes the international quasi-standard. Needless to say, we have been among the very first to establish our own Internet World Wide Web pages with the latest hot frequencies, plus convenient hyperlinks to all those superb geophysical and solar data and online radio propagation prediction services worldwide. You will find references to important Internet addresses throughout the various chapters of this book.

Our state-of-the-art computer system, combined with efficient book printers in this small university town, guarantee the shortest time imaginable for the production of this comprehensive reference book. Unlike conventional publications that waste *ten weeks* or even more, the time between filing the last entry into the data bank system and the mailing of the completed book takes us only *ten days*!

Spurious signals have been proven to exist with at least three commercial receivers of full different circuitry.

The recent disintegration of Czechoslovakia, Ethiopia, the so-called Soviet Union and Yugoslavia, and similar challenges to publishers of serious reference books resulted in the most radical changes in geography since at least the first world war. With the dissolution of Burundi, Liberia, Rwanda, Somalia and Zaire, the Balkan incidents expected for 18 JAN 1997, the imminent economic and political implosion of the Undemocratic People's Republic of Korea, the absorption of Hong Kong and Macao by China in 1997 and 1999, and dozens of national and regional conflicts going on, such changes will continue. As a principle, we change the name of a country solely when its independence has been recognised by the United Nations, the European Ununion or another authority of similar standing. Needless to say, the book in hand is the only international radio publication that fully considers these changes - *now* and not five years too late! The current sunspot minimum, with its recent shift to lower frequencies, is reflected as well.

In case of doubt, the spelling of place-names is the same as that used in the *Times Atlas of the World* (see the introduction to chapter 4), in the *Times Atlas and Encyclopaedia of the Sea*, and in the *Central Intelligence Agency (CIA) Polar Regions Atlas*. For geopolitical hot spots we refer to the very latest specialized maps available such as the *CIA Former Yugoslavia Map Folio*, the *CIA Map of the Balkan Region*, the *CIA Map of the Spratly and Paracel Islands*, the *CIA Serbia and Montenegro Summary Map*, the *Sazman Naqshabordari Keshvar Iran Map of the Commonwealth of Independent States and Newly Independent States*, and the *Times Map of the Western Balkans*. In the interests of simplicity there has been a general omission of diacritics in spellings derived by transliteration from non-English scripts, e.g. we use Canadon rather than Cañadón.

The mention of specific companies or products in articles or advertisements does not imply that they are endorsed or recommended by Klingenfuss Publications in preference to others of a similar nature which are not mentioned or advertised.

Progressive telecommunication authorities now tolerate the reception of utility radio stations. Readers are reminded, however, that the divulgence of the contents of radio transmissions which are not intended for the general use of the public is a violation of international and most national telecommunication acts. ☺

Sincerely,

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2 Monitoring utility stations

2.1 Introduction

The shortwave (SW) band covers frequencies from 3 to 30 MHz and its use is divided amongst various services. Current allocations were largely decided at the 1979 World Administrative Radio Conference (WARC) and have been modified by subsequent conferences such as the 1987 World Administrative Radio Conference for the Mobile Services (MOB). Presently, exclusive allocations for the amateur and broadcasting services occupy a total of only 6.0 MHz (22 %) of the SW band - the other 77 % of the SW band is used by utility services! Needless to say that - in the current reckless global power play - many countries and stations violate against this internationally agreed distribution. During recent years the situation has become so chaotic that the International Telecommunication Union (ITU) saw herself obliged to finally establish discipline by means of an explicit Recommendation 520 (WARC-92) entitled "Elimination of HF broadcasting on frequencies outside the HF bands allocated to the broadcasting service"! Anyway, by far the greatest part of the SW range is actually covered - and will continue to be covered - by utility stations. These belong to various services, such as the aeronautical, fixed, maritime, mobile, radionavigation, standard frequency service, etc. Several types of stations operate within these services, e.g. diplomatic, meteorological, military, police, point-to-point, press stations, and so on. They use various types of modulation, including radiotelephony (ISB, SSB), radiotelegraphy (Morse, CW), radioteletype (RTTY), facsimile (FAX), etc.

Many of these stations can be received and demodulated with suitable equipment. General coverage receivers with digital frequency readout and good high frequency (HF) characteristics greatly facilitate the monitoring of utility stations and are nowadays available for less than DEM 1500. Additional equipment such as personal computers, CW and RTTY video display converters or FAX decoders permit quasi-professional reception of modulation types which we had never dreamed of.

Technically, everybody equipped with RTTY gear is nowadays able to print press agencies, telex services, weather messages, diplomatic traffic, etc. He only needs the suitable "software" from which he can learn about frequencies, call signs, codes, schedules, and so on. By means of a FAX decoder he could record weather forecast charts, or satellite pictures relayed on SW. If he is able to read CW signals, he can copy the maritime traffic between coastal and ship stations, or between military stations, etc. This type of listening, in course of time, will become far more fascinating than monitoring amateur or broadcast stations.

2.2 Legal restrictions

Reception of utility transmissions is forbidden within a number of countries. The reason usually cited for such a situation is the need to protect sensitive transmissions from being received by parties other than the intended recipient.

This is a delicate matter, subject to a number of differing points of view - commercial, governmental, hobbyist and private. Some governments will actually go so far as to suppress publication of information concerning certain types of transmissions. The facts are:

- A lot of official publications and unofficial information about utility stations is freely available on the market, either directly from national and international authorities such as the Federal Communications Commission (FCC, in USA), ITU, World Meteorological Organization (WMO), etc., or from more or less qualified hobby authors.
- With receiving equipment readily available in most countries of the world, you could monitor transmissions from such stations which are not intended for the general use of the public.
- The monitoring of such transmissions could be illegal in your country.

Thus, in order to avoid problems, we advise you to keep the contents of such accidentally monitored transmissions strictly confidential and not, repeat ***not***, to make any use of it whatsoever. Remember that you would expect the same from the unwanted interceptor of your private phone call or business telefax message ...

2.3 Official publications

A list of publications is available from the ITU; General Secretariat; Sales Service; Place des Nations; CH-1211 GENEVA 20; Switzerland [telefax ++41 22 7305194; *http://www.itu.ch/*]. Items of general interest to radio monitors are

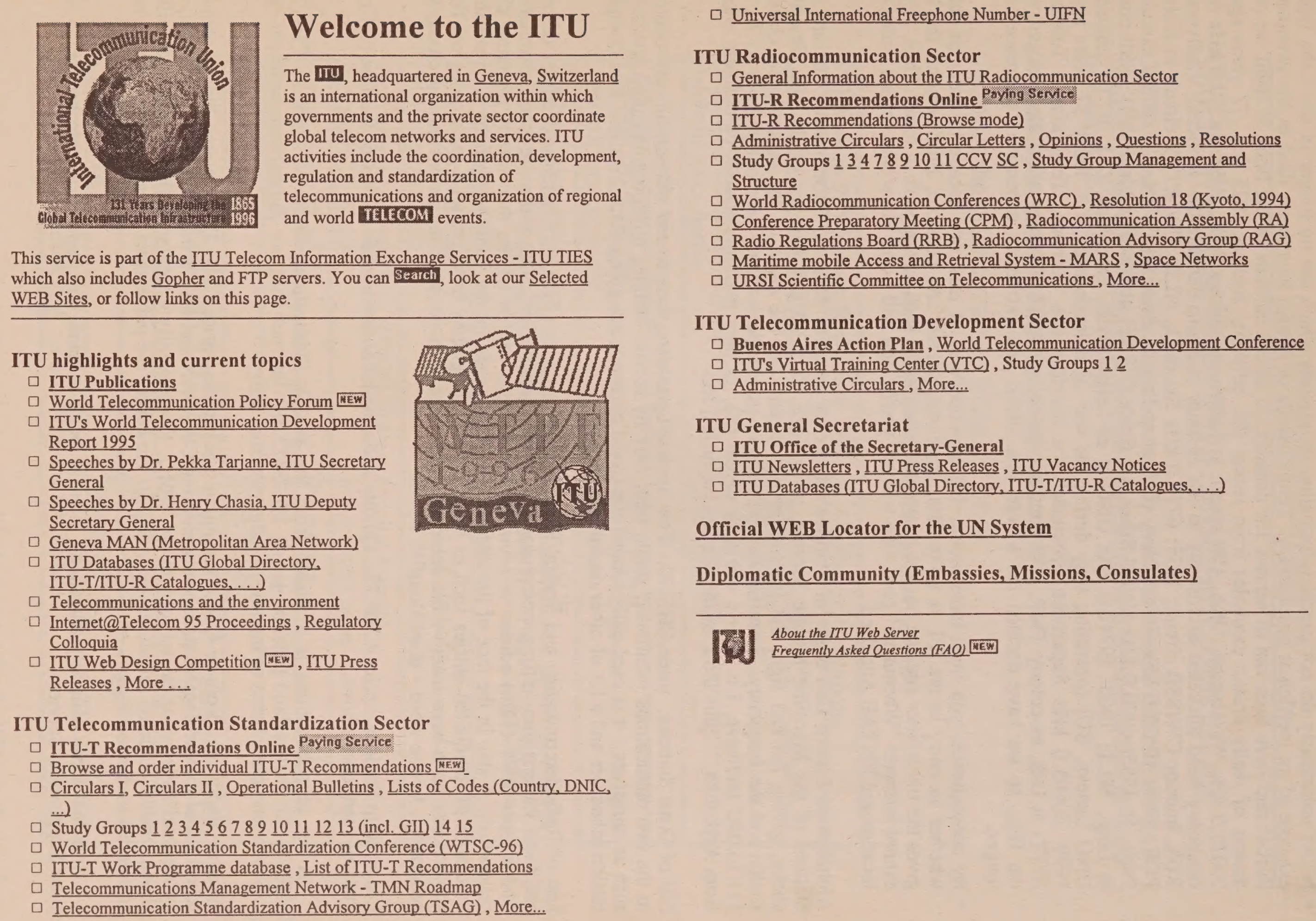
- Handbook for Monitoring Stations, price CHF 148. Comprehensive and interesting description of the methods and procedures of national telecommunication administration (NTA) monitoring stations, ranging from the siting of such stations over equipment and personnel to measurements. Needless to say, there is a considerable difference in the methods - and lightyears of difference in the available technology - to the monitoring executed by e.g. the Government Communication Headquarters (GCHQ, G), the National Security Agency (NSA, USA), the Service de Documentation Extérieure et de Contre-Espionage (SDECE, F), and the Federal Agency for Government Communication and Information (FAPSI) of the Federalnaja Sluschba Kontraswedki (FSK, RUS, successor organization of the former Komitet Gossudarstwennoy Besopasnostij [KGB]), and similar organizations operating on a global basis with a worldwide net of stations and special satellite systems. Consequently, certain chapters (e.g. that about "Types of emissions encountered in the HF band") are amusing reading for those who know what's really going on there ...

- Radio Regulations (RRs), price CHF 197. Three ring binders contain the results of WARC 1979, MOB 1987, WARC 1992 and several specialized conferences. The book in hand includes those RRs which are of importance to SW radio. During the past decades the RRs have become impossibly complex and have not kept up with the rapidly changing environment. They no longer deal adequately with the rapid pace of technological change and with the convergence of technologies. An excellent example for this is the latest edition 1992 of the so-called "Manual for use by the Maritime Mobile Service" which was obviously compiled by dull and incompetent bureaucrats, since it is absolutely useless for the practical work of a coast or ship station radio operator. Consequently, experts have for ages recommended to simplify the RRs and to consider new methods for allocating the radio-frequency spectrum. Believe it or not: in a desperate attempt to bridge the widening gap between the RRs and the radiocommunication environment, i.e. between fiction and the facts described in the book in hand, the sleepy ITU is currently being revolutionized - see chapter 2.8.

- International Frequency List (IFL). The microfiche edition covers 70,000 pages and costs approximately DEM 4,000. The October 1996 IFL edition 1996-2 published on two compact disk read-only memories (CD-ROMs) costs CHF 337. It covers more than 1,000,000 radio frequencies with more than 5,000,000 entries and can be retrieved with standard CD-ROM drives according to ISO 9660.

  The IFL contains data reported by NTAs to the Radio Regulations Board (RRB). Consequently, the quality of the IFL depends on the quality of the NTA data. Main drawbacks of this procedure are

  - NTAs report to the RRB usually on an extremely irregular basis. This goes for virtually all countries of the world, from the most "underdeveloped" ones over the would-be "major" countries to the self-appointed former "superpowers".
  - NTAs normally cannot report information about company, diplomatic, military or private stations. This is because they do not allocate these frequencies themselves, and they do not get any lists from e.g. the Ministry of Defense (MOD). Consequently, you will not find the frequencies of the drilling rigs in the North Sea or off Seria in Brunei, or those of the United Nations Organization (UNO) at Monrovia in Liberia, or those of the British High Commission at Port Louis in Mauritius, or those of the French Forces (FF) at Dhahran in Saudi Arabia, or those of the Medecins Sans Frontieres (MSF) in Kigali in Rwanda, in the IFL.


International Telecommunication Union
131 Years Developing the Global Telecommunication Infrastructure 1865 1996
Geneva
ITU

Welcome to the ITU

The ITU, headquartered in Geneva, Switzerland is an international organization within which governments and the private sector coordinate global telecom networks and services. ITU activities include the coordination, development, regulation and standardization of telecommunications and organization of regional and world TELECOM events.

This service is part of the ITU Telecom Information Exchange Services - ITU TIES which also includes Gopher and FTP servers. You can Search, look at our Selected WEB Sites, or follow links on this page.

ITU highlights and current topics

☐ **ITU Publications**
☐ World Telecommunication Policy Forum NEW
☐ ITU's World Telecommunication Development Report 1995
☐ Speeches by Dr. Pekka Tarjanne, ITU Secretary General
☐ Speeches by Dr. Henry Chasia, ITU Deputy Secretary General
☐ Geneva MAN (Metropolitan Area Network)
☐ ITU Databases (ITU Global Directory, ITU-T/ITU-R Catalogues, . . .)
☐ Telecommunications and the environment
☐ Internet@Telecom 95 Proceedings , Regulatory Colloquia
☐ ITU Web Design Competition NEW , ITU Press Releases , More . . .

ITU Telecommunication Standardization Sector

☐ **ITU-T Recommendations Online** Paying Service
☐ Browse and order individual ITU-T Recommendations NEW
☐ Circulars I, Circulars II , Operational Bulletins , Lists of Codes (Country, DNIC, ...)
☐ Study Groups 1 2 3 4 5 6 7 8 9 10 11 12 13 (incl. GII) 14 15
☐ World Telecommunication Standardization Conference (WTSC-96)
☐ ITU-T Work Programme database , List of ITU-T Recommendations
☐ Telecommunications Management Network - TMN Roadmap
☐ Telecommunication Standardization Advisory Group (TSAG) , More...

☐ Universal International Freephone Number - UIFN

ITU Radiocommunication Sector

☐ General Information about the ITU Radiocommunication Sector
☐ **ITU-R Recommendations Online** Paying Service
☐ ITU-R Recommendations (Browse mode)
☐ Administrative Circulars , Circular Letters , Opinions , Questions , Resolutions
☐ Study Groups 1 3 4 7 8 9 10 11 CCV SC , Study Group Management and Structure
☐ World Radiocommunication Conferences (WRC) , Resolution 18 (Kyoto, 1994)
☐ Conference Preparatory Meeting (CPM) , Radiocommunication Assembly (RA)
☐ Radio Regulations Board (RRB) , Radiocommunication Advisory Group (RAG)
☐ Maritime mobile Access and Retrieval System - MARS , Space Networks
☐ URSI Scientific Committee on Telecommunications , More...

ITU Telecommunication Development Sector

☐ **Buenos Aires Action Plan** , World Telecommunication Development Conference
☐ ITU's Virtual Training Center (VTC) , Study Groups 1 2
☐ Administrative Circulars , More...

ITU General Secretariat

☐ **ITU Office of the Secretary-General**
☐ ITU Newsletters , ITU Press Releases , ITU Vacancy Notices
☐ ITU Databases (ITU Global Directory, ITU-T/ITU-R Catalogues, . . .)

Official WEB Locator for the UN System

Diplomatic Community (Embassies, Missions, Consulates)

ITU *About the ITU Web Server*
Frequently Asked Questions (FAQ) NEW

Front page of the ITU Internet World Wide Web site *http://www.itu.ch/*

  - NTAs notoriously do not cancel information on circuits which are no longer in use - the typical example of an inefficient bureaucrazy. Tenthousands of entries have been filed in the twenties or thirties and have been out of service for decades. In recent editions of the book in hand we cited dozens of really drastic examples from recent IFL editions, such as 1925 (i.e. 72 years ago!): 20075.0 kHz Washington, USA, CW circuit to Balboa, ex-colony PNR; 1933: 14200.0 kHz (in a frequency band allocated exclusively to the amateur and amateur-satellite services) Vladivostok, RUS, interior CW/SSB circuit; 1935: 6770.0 kHz Kootwijk, NLD, CW/RTTY circuit to Lisbon, POR; 1946: 10635.0 kHz French Navy (FN) at ex-Saigon, ex-colony VTN, CW/RTTY circuit to Paris, F; 1955: 6920.0 kHz United States Air Force (USAF) at Wheelus Field, LBY, SSB circuit to Luqa, MLT; 1960: 19742.0 kHz UNO at ex-Leopoldville, ex-colony ZAI, RTTY circuit to UNO Geneva, SUI (operating only during the war of independence, i.e. today 37 years ago!); 1970: 20665.0 kHz Reparticao Provincial dos Servicos dos Correios, Telegrafos e Telefonos (CTT) at Dili, ex-colony TMP, CW circuit to ex-colony MOZ. *Nothing at all* has changed with the IFL; so we have decided *not* to use this idiotic and extremely expensive "reference" any longer.

  - By consequence, you must have monitoring experience of at least one decade in order to detect whether an entry in the IFL is up-to-date, complete, correct and possible. Furthermore, the IFL gives the transmitter site and not the complete station name such as the book in hand. Thus, if you cannot interpret "Whenuapai" (and who will tell you?), you will never know that entries under this location are RNZAF Auckland ...

- Alphabetical List of Call Signs of Stations other than Amateur Stations, Experimental Stations and Stations of the Maritime Mobile Service, price CHF 75. This is a derivate of the IFL described above, giving the call sign, the transmitter site (again, not the name of the station), the class of station and the frequency. From the current edition, you could - again - tear out pages 9 to 26 and 111 to 142 inclusive, i.e. nearly one fifth of the file, as they list tenthousands of obsolete entries from Argentina ... plus those of many other countries, too.

- List of Coast Stations, price CHF 72. This book is up-to-date, easy to use and helpful, as - contrary to the two publications mentioned above used only by narrow-minded telecommunication specialists such as ourselves - it is used daily around the world on every sea-going ship. You will find complete station schedules and a lot of other useful information.

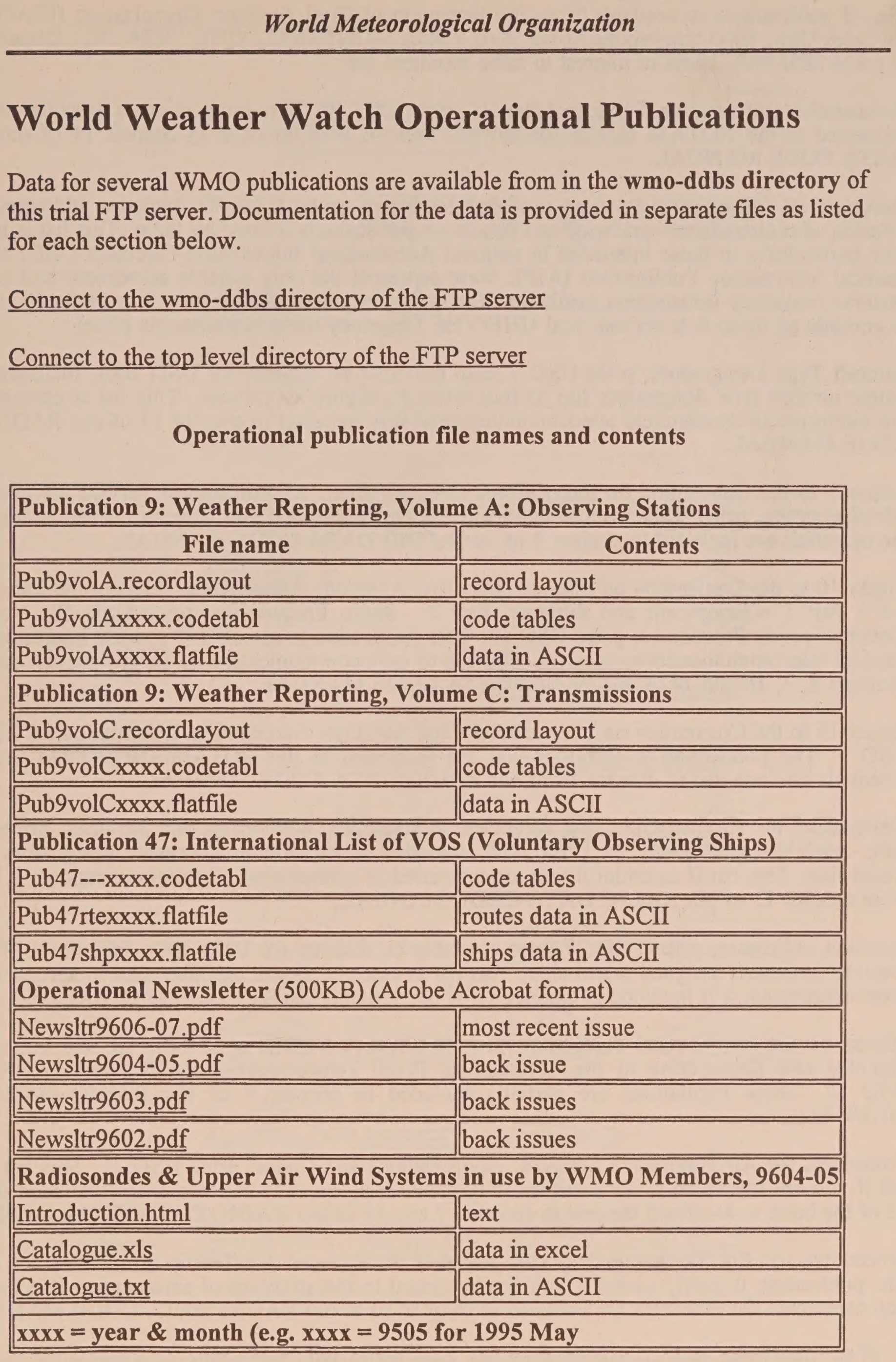
- List of Radiodetermination and Special Service Stations, price CHF 63. Contains schedules of coast and fixed stations transmitting meteorological and navigational bulletins, and some other information. The current 1995 (12th) edition is a virtually unchanged reprint of the then totally outdated 1992 concoction. A slap in the face of the responsible editor would be the minimum penalty for publishing thousands of antiquated entries such as those historic telegraphy broadcasts by meteorological fixed stations that have been inactive for decades. He did not even consider the recent radical changes in geography. In one word - scandalous!

- List of Ship Stations, price CHF 73. Quality and circulation are similar to that of the List of Coast Stations mentioned above.

A list of publications is available from the WMO; Publications Sales Unit; BP 5; CH-1211 GENEVA 20; Switzerland [telefax ++41 22 7342326]. Internet sites are *http://www.wmo.ch/* and *ftp://www.wmo.ch/* . Items of interest to radio monitors are

- Weather Reporting, Volume C2 - Transmission Schedules, price CHF 72. One ring-binder contains schedules of meteorological stations transmitting CW, FAX and RTTY bulletins. The data is reported by national meteorological services to the WMO. Consequently - similar to the IFL story described above - many outdated schedules are included. However, the publication is partly useful if you have an interest in meteorology.

Note that these official publications, like the book in hand, are kept up to date by means of a regular Supplement Service.



World Meteorological Organization

World Weather Watch Operational Publications

Data for several WMO publications are available from in the **wmo-ddbs directory** of this trial FTP server. Documentation for the data is provided in separate files as listed for each section below.

Connect to the wmo-ddbs directory of the FTP server

Connect to the top level directory of the FTP server

Operational publication file names and contents

Publication 9: Weather Reporting, Volume A: Observing Stations	
File name	**Contents**
Pub9volA.recordlayout	record layout
Pub9volAxxxx.codetabl	code tables
Pub9volAxxxx.flatfile	data in ASCII
Publication 9: Weather Reporting, Volume C: Transmissions	
Pub9volC.recordlayout	record layout
Pub9volCxxxx.codetabl	code tables
Pub9volCxxxx.flatfile	data in ASCII
Publication 47: International List of VOS (Voluntary Observing Ships)	
Pub47---xxxx.codetabl	code tables
Pub47rtexxxx.flatfile	routes data in ASCII
Pub47shpxxxx.flatfile	ships data in ASCII
Operational Newsletter (500KB) (Adobe Acrobat format)	
Newsltr9606-07.pdf	most recent issue
Newsltr9604-05.pdf	back issue
Newsltr9603.pdf	back issues
Newsltr9602.pdf	back issues
Radiosondes & Upper Air Wind Systems in use by WMO Members, 9604-05	
Introduction.html	text
Catalogue.xls	data in excel
Catalogue.txt	data in ASCII
xxxx = year & month (e.g. xxxx = 9505 for 1995 May	

Operational publications are available at this page on the WMO Internet World Wide Web site *http://www.wmo.ch/web/www/wmo-ddbs-index.html*

A list of publications is available from the International Civil Aviation Organization (ICAO); Document Sales Unit; 1000 Sherbrooke Street West # 400; MONTREAL, QUE H3A 2R2; Canada [telefax ++1 514 2856769]. Items of interest to radio monitors are

- Aeronautical Information Services Manual, price USD 40. This publication is essential if you are interested in the NOTAM (notice for airmen) system; it is included in chapter 14 of our RADIO DATA CODE MANUAL.

- Aeronautical Information Services provided by States, price USD 20. Includes addresses of civil aviation administrations worldwide and details on publications offered by them. This list is indispensable particularly to those interested in national Aeronautical Information Circulars (AIC) and Aeronautical Information Publications (AIP); these represent the only reliable aerodrome and navigation systems frequency information available. You will pretty soon realize why it is perfectly impossible to compile an up-to-date aeronautical UHF/VHF frequency list at a reasonable price!

- Aircraft Type Designators, price USD 9 (also available on diskette for USD 200). Includes all mnemonic aircraft type designators (up to four letters) assigned worldwide. This list is essential if you are interested in aeronautical telecommunications; it is included in chapter 13 of our RADIO DATA CODE MANUAL.

- Annex 3 to the Convention on International Civil Aviation: Meteorological Service for International Air Navigation, price USD 14. The publication is partly useful if you have an interest in this subject; the essentials are included in chapter 3 of our RADIO DATA CODE MANUAL.

- Annex 10 to the Convention on International Civil Aviation: Aeronautical Telecommunications Volume 1 Part 1 - Equipment and Systems, Part 2 - Radio Frequencies, price USD 52, Volume 2 - Communication Procedures, price USD 13. This publication is essential if you are interested in aeronautical telecommunications; excerpts referring to radiocommunication on shortwave can be found in chapters 8, 9, 10 and 14 of our RADIO DATA CODE MANUAL.

- Annex 15 to the Convention on International Civil Aviation: Aeronautical Information Services, price USD 9. The publication is useful if you are interested in the NOTAM/SNOWTAM system; the essentials are included in chapter 14 of our RADIO DATA CODE MANUAL.

- Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services, price USD 30 (also available on diskette for USD 200). Includes all three-letter addressee designators assigned worldwide. This list is essential if you are interested in aeronautical telecommunications; it is included in chapter 12 of our RADIO DATA CODE MANUAL.

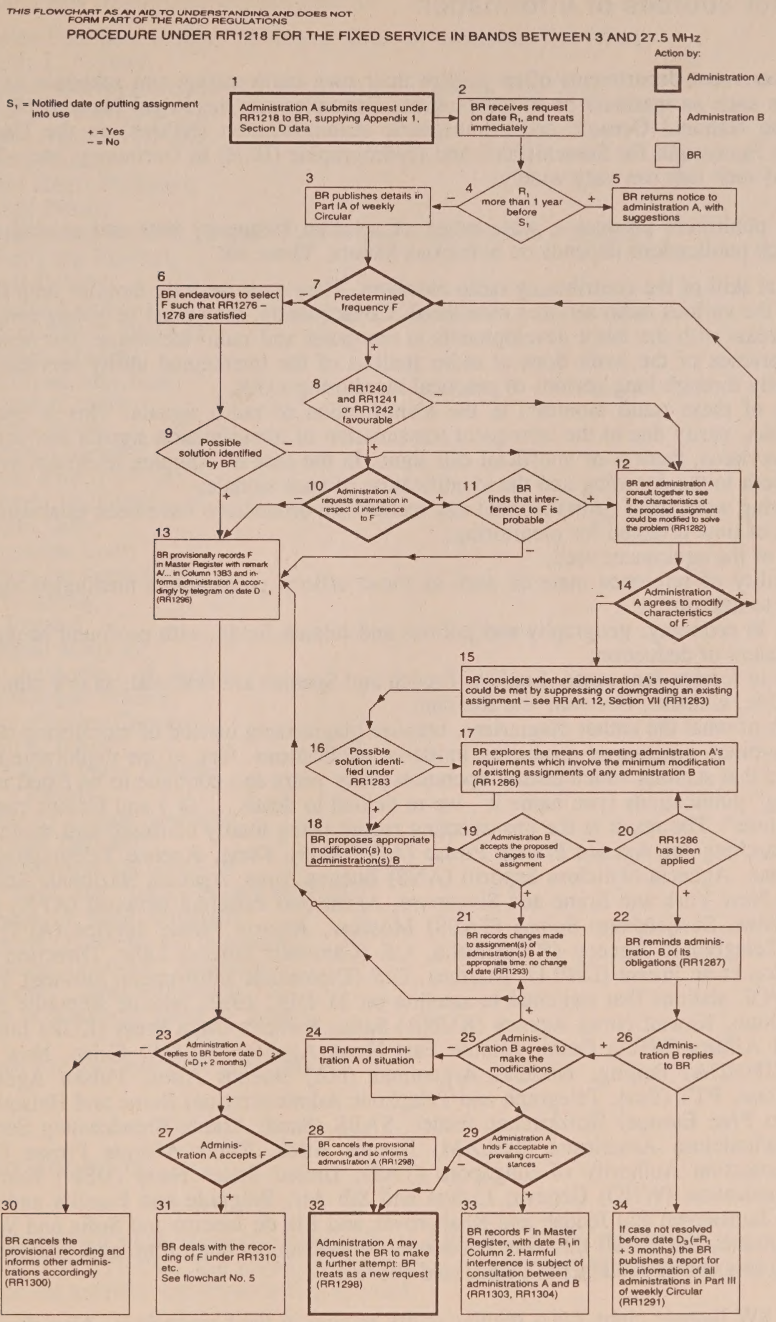
- Location Indicators, price USD 27 (also available on diskette for USD 200). Includes all four-letter location indicators assigned worldwide. This list is essential if you are interested in aeronautical telecommunications; it is included in chapter 11 of our RADIO DATA CODE MANUAL.

- Manual on the Aeronautical Telecommunication Network (ATN), price USD 10, and Manual on the Planning and Engineering of the Aeronautical Fixed Telecommunication Network (AFTN), price USD 22. These regulations are partially included in chapter 9 of our RADIO DATA CODE MANUAL.

- Procedures for Air Navigation Services: Abbreviations and Codes, price USD 21. This list is essential if you are interested in aeronautical telecommunications; it is to some extent included in chapter 13 of the book in hand and the rest in chapters 7 and 14 of our RADIO DATA CODE MANUAL.

- Procedures for Air Navigation Services: Rules of the Air and Air Traffic Services, price USD 44. The publication is partly useful if you are interested in the structure of aeronautical telecommunication messages; the essentials are included in chapter 10 of our RADIO DATA CODE MANUAL.

Note that these official publications are kept up to date by means of a irregular Supplement Service.


THIS FLOWCHART AS AN AID TO UNDERSTANDING AND DOES NOT FORM PART OF THE RADIO REGULATIONS
PROCEDURE UNDER RR1218 FOR THE FIXED SERVICE IN BANDS BETWEEN 3 AND 27.5 MHz
Action by:
Administration A
Administration B
BR
S1 = Notified date of putting assignment into use
+ = Yes
– = No
1 Administration A submits request under RR1218 to BR, supplying Appendix 1, Section D data
2 BR receives request on date R1, and treats immediately
3 BR publishes details in Part IA of weekly Circular
4 R1 more than 1 year before S1
5 BR returns notice to administration A, with suggestions
6 BR endeavours to select F such that RR1276 – 1278 are satisfied
7 Predetermined frequency F
8 RR1240 and RR1241 or RR1242 favourable
9 Possible solution identified by BR
10 Administration A requests examination in respect of interference to F
11 BR finds that interference to F is probable
12 BR and administration A consult together to see if the characteristics of the proposed assignment could be modified to solve the problem (RR1282)
13 BR provisionally records F in Master Register with remark A/... in Column 13B3 and informs administration A accordingly by telegram on date D1 (RR1296)
14 Administration A agrees to modify characteristics of F
15 BR considers whether administration A's requirements could be met by suppressing or downgrading an existing assignment – see RR Art. 12, Section VII (RR1283)
16 Possible solution identified under RR1283
17 BR explores the means of meeting administration A's requirements which involve the minimum modification of existing assignments of any administration B (RR1286)
18 BR proposes appropriate modification(s) to administration(s) B
19 Administration B accepts the proposed changes to its assignment
20 RR1286 has been applied
21 BR records changes made to assignment(s) of administration(s) B at the appropriate time: no change of date (RR1293)
22 BR reminds administration B of its obligations (RR1287)
23 Administration A replies to BR before date D2 (=D1+ 2 months)
24 BR informs administration A of situation
25 Administration B agrees to make the modifications
26 Administration B replies to BR
27 Administration A accepts F
28 BR cancels the provisional recording and so informs administration A (RR1298)
29 Administration A finds F acceptable in prevailing circumstances
30 BR cancels the provisional recording and informs other administrations accordingly (RR1300)
31 BR deals with the recording of F under RR1310 etc. See flowchart No. 5
32 Administration A may request the BR to make a further attempt: BR treats as a new request (RR1298)
33 BR records F in Master Register, with date R1 in Column 2. Harmful interference is subject of consultation between administrations A and B (RR1303, RR1304)
34 If case not resolved before date D3 (=R1 + 3 months) the BR publishes a report for the information of all administrations in Part III of weekly Circular (RR1291)
+
–

No, this is not a joke. It is *"an aid to understanding"*. Such are the Radio Regulations (edition 1994), currently in force. This is roughly ITU's wishful thinking of what happens *"when an administration desires to request the assistance of the Radiocommunication Bureau in selecting a frequency assignment to a station of the fixes service"*. Anyone said broohaha?

2.4 Other sources of information

National government departments often publish their own radio station and schedule lists for selected target groups such as mariners or meteorologists. Examples are the Royal Navy (RN) in the United Kingdom, the National Oceanic and Atmospheric Administration (NOAA) in the United States of America, the Bundesamt für Seeschiffahrt und Hydrographie (BSH) in Germoney, etc. The timeliness and quality of such lists can vary widely.

Hobby publishers produce a wide range of selected frequency lists and related material. The quality of such publications depends on numerous factors. These are

- the technical skill of the contributing radio monitors. They must be fully familiar with the traffic procedures of the various radio services monitored. Consequently, they must be young enough to be able to keep abreast with the latest developments in computer and radio technique, but nevertheless have sound experience of the work done at radio stations of the intercepted utility services. This can be obtained only through long periods of practical monitoring work;
- experience of these radio monitors in the identification of radio signals. This is one of the most difficult tasks, partly due to the infrequent transmission of identification signals and partly due to the use of abbreviated, tactical or unofficial call signs. In the case of complex telegraph systems there is difficulty both in the decoding and the identification of such signals;
- the monitoring work itself (provided that any methodical procedures have been established at all);
- the amount of time invested for monitoring;
- the quality of the equipment used;
- the availability of reference material such as those official publications mentioned above, plus the experience to interpret it;
- proficiency in economy, geography and politics and related fields, with profound background knowledge and talent of deduction;
- proficiency in foreign languages. English, French and Spanish are essential, as is a minimum vocabulary of Arabic, Chinese, German, and Russian;
- the question of what the author plagiarizes, because plagiarizing instead of monitoring continues to be the most common practice of producing imitative publications. One of the deplorable effects of this "method" is that stations which ceased operation many years ago continue to be listed in self-appointed "leading" publications (you name it - we're tickled to death ... ☺) and further concoctions of a similar "nature". The result is the unsuspecting reader being totally confused and scanning the bands in vain, searching for Agence France Presse (AFP) Hong Kong, Agence Telegraphique Albanaise (ATA) Tirana, Agencia Noticiosa Saporiti (ANS) Buenos Aires, Agenzia Nazionale Stampa Associata (ANSA) New York and Rome and Singapore, Agentstwo Petschati Nowosti (APN) and Telegrafnoje Agentstwo Sowjetskogo Sojusa (TASS) Moscow, Algerie Presse Service (APS) El Djaza'ir, Bulgarian Telegraphic Agency (BTA) Sofia, CF (Canadian Forces) Lahr, Direction des Services d'Information et de Presse (DIPLO) Noumea, DIS (Diplomatic Information Service) Tokyo, dozens of INTERPOL stations that switched to satellite on 31 DEC 1993, Islamic Republic News Agency (IRNA) Tehran, Kuwait News Agency (KUNA) Safat, Kwacha Unita Press (KUP) Jamba, Ministry of External Affairs (MEA) Delhi, Middle East News Agency (MENA) Cairo, New China News Agency (XINHUA) Beijing, Noticias Argentinas (NA) Buenos Aires, Polska Agencja Prasowa (PAP) Warsaw, PTT (Post, Telegraph and Telephone Administration) Berne and Helsinki and Kabul, RFE (Radio Free Europe) Holzkirchen feeder, SABS (Saudi Arabia Broadcasting Service) Riyadh feeder, Telenoticiosa Americana (TELAM) Buenos Aires, Tunis Afrique Presse (TAP) Tunis, Telecommunication Authority of Singapore (TAS), United States Navy (USN) Exmouth, World Health Organization (WHO) Geneva; Lisbon and Sib Air; Belgrade and Brasilia and Helsinki and Jakarta and Jamestown and Jeddah and Khabarovsk and Rio de Janeiro and Sofia and Warsaw Meteo and and and and, but ... all this was a loooooooooooooooooooooong time ago! Compare yourself - and take a guess which publisher is plagiarized above all ...

Several SW listener clubs run a regular utility section in their magazines. Also check specialized listener and radio magazines for information about utility stations. For convenient hyperlinks see the pertinent list on our Internet homepage *http://ourworld.compuserve.com/homepages/Klingenfuss/* Thousands of interesting pages can be found elsewhere on the Internet with our brandnew INTERNET RADIO GUIDE.

Information about new frequencies was supplied by

- Australia: Allen Fountain, Utility DX Report editor of Australian DX News;
- Australia: Eddy L. Waters;
- Canada: Sheldon Harvey, President of Canadian International DX Club;
- Denmark: Per Boe Andersen OZ4B;
- France: Robert Azam F11DQA;
- France: Marcel Hasse;
- France: Albert Henri Planchon;
- France: Patrick Privat;
- France: Daniel Wantz F11BBL, President of Union des Ecouteurs Français;
- Germany: Wolfgang Büschel;
- Germany: Leif Dehio;
- Germany: Dieter Kradel;
- Germany: Harald Kuhl DL1ABJ;
- Germany: Jürgen Martens;
- Germany: Wilfried Melchior;
- Germany: Thomas Müller;
- Germany: Peter Nolte;
- Germany: Marius Rensen;
- Greece: Costas Krallis SV1XV;
- Italy: Luca Barbi IK2NUQ;
- Italy: Leonardo Lella;
- Italy: Giannantonio Lodi;
- Italy: Dr. Massimo Petrantoni;
- Italy: Roberto Robba;
- Italy: Paolo Romani;
- Mauritius: Raoul Maujean;
- Netherlands: Anthonie L.B. Jansen;
- Netherlands: Michiel Schaay;
- New Zealand: Charles Chenery;
- New Zealand: I. Julian;
- Spain: Juan Carlos Pérez Arribas;
- Spain: K.A. Lehnsdal;
- Spain: Raimundo Aragon Sanchez;
- Sweden: Lennart Deimert;
- Sweden: Åke Jonsson SM7HNF;
- Switzerland: Dipl.-Ing. Sandro Jaeger HB9DBJ;
- United Kingdom: J. Neal Arundale;
- United Kingdom: Laurence G. Jamieson;
- United Kingdom: George F. Newport;
- United Kingdom: Lionel Roithmeir;
- United States of America: Todd D. Dokey.

Thank you for your excellent cooperation!

2.5 Radio services

For the definition of all radio services please refer to RRs 20 - 57 in chapter 19 of our GUIDE TO UTILITY RADIO STATIONS. The following description of the most important services found on SW does not include the amateur and broadcasting services.

2.5.1 Fixed service

In a frequency band allocated to the fixed service, e.g. 11400 - 11600 kHz, you will find many different types of stations. These include

- Aeronautical fixed stations. Example: Plaisance Air, MAU, call sign 3BZ. They use CW, RTTY and SSB circuits to ensure communication from one airport to another. The major part of the Aeronautical Fixed Service (AFS) is organized as the Aeronautical Fixed Telecommunication Network (AFTN) and handles written messages. See chapters 7 to 14 in our RADIO DATA CODE MANUAL for detailed explanations of the standardized AFTN message format and the various abbreviations, codes and message types used.
- Beacon stations. Example: Beacon Kaliningrad, RUS, characteristic signal 'P'. They continuously transmit characteristic signals in CW and are presumably used for radiodetermination purposes.
- Broadcast feeder stations. Example: VoA Greenville feeder, USA. These transmissions feed relay stations abroad with either one program (SSB) or two programs (ISB).
- Diplomatic stations. Example: Ministry of Foreign Affairs (MFA) El Djaza'ir, ALG, call sign 7RQ 20. The MFAs normally transmit traffic to one selected embassy abroad, or collective broadcasts such as press reviews to all embassies e.g. in Africa. Few of these stations use CW or SSB while the majority handles written messages in RTTY. You will be able to read only parts of the real amount of the diplomatic traffic present on SW because most radionets use either their own non-standard RTTY system which can be created very easily with modern microprocessor technique, or they use standard RTTY systems where delicate traffic is encrypted in e.g. five-letter groups, or even a combination of both.
- Intelligence service stations. Example: Foreign Secret Service (MOSSAD) Tel Aviv, ISR, fictive call sign 'C37A'. Normally, intelligence service traffic cannot be read, similar to that of diplomatic stations mentioned above. Dozens of intelligence information sources are included in our brandnew INTERNET RADIO GUIDE.
- International Committee of the Red Cross (ICRC) stations. Example: ICRC Vukovar, HRV, fictive call sign 'RC2VUK'. The ICRC net uses CW, RTTY and SSB, often on frequencies adjacent to the amateur radio bands so that amateur radio equipment can be used in case of a disaster when normal radiocommunication breaks down. The central station is located at Geneva, SUI.
- INTERPOL stations. Example: INTERPOL Tokyo, J, call sign JPA. The few SW stations remaining from the global INTERPOL net, which is now on satellite, use RTTY with the simplex teleprinting over radio (SITOR) system (see chapter 18.36 in our RADIO DATA CODE MANUAL).
- Meteorological stations. Example: Pointe Corail Meteo, ROD, no call sign used. Meteo stations transmit either broadcasts intended for reception in a specified region of the world, or handle point-to-point circuits to selected recipients. Modulation types used are CW, FAX (see chapter 11 for FAX station schedules) and RTTY (see chapter 10 for RTTY station frequencies). Similar to the AFTN mentioned above, the WMO GTS (Global Telecommunication System) handles meteorological messages in a special message format. The meteorological bulletins themselves, i.e. reports, forecasts etc., are encoded in order to ensure rapid distribution and processing by computer systems, common codes being PILOT, SHIP, SYNOP, TEMP. In addition to meteo stations, many aeronautical fixed stations (see above) transmit meteorological bulletins related to international aviation, e.g. code forms AIREP, METAR, TAF. The reception of meteo stations enables you to get the latest weather forecasts or satellite pictures up to several hours ahead of the television weather forecast or even one day ahead of their publication in a newspaper. See chapters 2 to 5 in our RADIO DATA CODE MANUAL for detailed explanations of the standardized WMO GTS message format and the meteo code forms, and our brandnew INTERNET RADIO GUIDE for dozens of meteorological information sources.
- Military stations. Example: USA Dhahran, ARS, fictive call sign '141'. These include air force, army, navy etc. stations. The traffic is in some cases "unclassified", i.e. not protected against unwanted interception, e.g. meteorological broadcasts in the form of FAX charts or RTTY bulletins for naval units. Messages are usually transmitted in a common format - see chapter 22.6. However, in many cases military traffic cannot be read, similar to that of diplomatic stations mentioned above.
- NTA stations. Example: Direction des Telecommunications des Reseaux Exterieurs (DTRE) Martin de Vivies, AMS, call sign FJY 4. This is the classical case of point-to-point circuits in the fixed service. Until 1970 - 1971, most overseas telegraph and telephone traffic was transmitted via SW radio circuits which are now, in the satellite age, a dead ball. Modulation types used are CW, RTTY and SSB. See chapter 22 for the standard telegram format used worldwide.
- Police stations. Example: Roseau Police, DMA, no call sign used. This term comprises all territorial gendarmerie, police, prefecture and security radionets. They transmit in CW, RTTY and SSB and normally use clear language instead of encryption. Worldwide operating INTERPOL is a special case, see above.
- Press agencies. Example: Iraqi News Agency (INA) Baghdad, IRQ, call sign YIL/YIX. You can receive FAX pictures and RTTY bulletins. See chapters 8 and 9 for press agency schedules. The

GLOBE
WIRELESS®

New Station - Rogers City Radio / WLC

Rogers City Radio is located in the Northeast corner of the lower peninsula of Michigan and offers superb coverage of the US and Canadian **Great Lakes** and **St. Lawrence Seaway** areas.

Central Radio & Telegraph Co., the operator of Rogers City Radio, will be using existing radio equipment for Globe Wireless services. This station is expected to become a fully operational node on the Global Radio Network by November.

New Station - Cape Town Radio / ZSC

Cape Town Radio is located near the Cape of Good Hope at the Southern end of the African continent and offers superb coverage of the **Indian Ocean** and the **South Atlantic Ocean**.

Telkom SA, the Australian telephone company, will be using existing radio equipment for Globe Wireless services. This station is expected to become a fully operational node on the Global Radio Network by October.

New Station - Barbados Radio / 8PO

Located in the Eastern Caribbean, Barbados Radio will offer excellent coverage of both the **Caribbean Sea** and the central **Atlantic Ocean**.

Our construction crew is planning a trip to Barbados later this year to install receivers, transmitters and antennas. This station is expected to become a fully operational node on the Global Radio Network by early 1997.

This page is under construction, please pardon our dust!

One of the best Internet World Wide Web homepages of utility radio stations is *http://www.globewireless.com/stations/conzone.htm* . Needless to say, we will keep you informed on all these new stations and frequencies by means of our SUPPLEMENT SERVICE.

monitoring of these stations is a favourite among SW listeners because it enables you to get a lot of information which cannot be found elsewhere, i.e. you save one step in the global manipulation process. However, during the last decade, most of the famous international news agencies have ceased their SW broadcasts, and the deplorable remainder consists of several quite interesting national news agencies from the so-called "Third World", and the usual idiotic political propaganda stuff from totalitarian governments. Note that according to the legal restrictions described above under 2.2, you are generally not authorized to make any use of press bulletins monitored, i.e. you must ***not*** produce your own newspaper now!

- United Nations Organization (UNO) stations. Example: UNO Khartoum, SDN, call sign 4UK. UNO stations use RTTY in clear language with an own message format. The central station is located at Geneva, SUI.

2.5.2 Aeronautical mobile service

Mainly SSB (upper sideband, USB) is used in the aeronautical mobile service, in some cases with a selective calling (SELCAL) system for direct access to a selected aircraft. There are two types of frequency bands allocated to the aeronautical mobile service.

The bands allocated to the route (R) service, e.g. 8815 - 8965 kHz, are intended for communications concerning flights along national or international civil air routes. Frequencies are spaced 3.0 kHz. See chapter 20 for the frequency allotment plan according to the various areas. These are shown on the maps at the end of this book. Worldwide allotment areas used for long-distance communication between an aeronautical station and an aircraft are defined in chapter 24 under W I to W V.

The off-route (OR) bands, e.g. 8965 - 9040 kHz, are intended for communications, including those relating to flight coordination, concerning flights primarily outside national or international civil air routes, i.e. mainly military communications. The new 3.0 kHz frequency spacing scheme to be applied by 15 December 1997 is perfectly integrated in chapter 3.

The station types to be found are

- Aeronautical stations. Example: Mahe Air, SEY, no call sign used. These stations handle traffic between airports and aircraft en route, and vice versa. Several stations broadcast meteorological information for aircraft in flight (VOLMET) on selected frequencies according to a fixed schedule. VOLMET is usually read down according to the METAR and TAF codes (decoding see chapter 3 in our RADIO DATA CODE MANUAL) for main airports in the region concerned.
- Aircraft stations. Example: Silk 176, SIN, call sign 9VTRD, in this case named after its flight number.

2.5.3 Maritime mobile service

The frequency bands allocated to the maritime mobile service, e.g. 12230 - 13200 kHz, are further divided into sub-bands for coast stations and ship stations according to the type of modulation employed - see the attached folders at the end of this reference book. Most frequencies are paired, e.g. in RTTY the coast station transmits on 8430.0 kHz and the ship station on 8390.0 kHz, and the same in SSB on 19761.0 and 18786.0 kHz. The station types to be found are

- Coast stations. Example: Awanui Radio (R), NZL, call sign ZLA. These stations relay traffic between the terrestrial telecommunication network, e.g. the public telephone and telex service, and ship stations at sea, and vice versa. Modulation types used are CW, RTTY, and SSB (USB). In RTTY, the SITOR system is normally used with a standard shift of 170 Hz - see chapter 18.36.4 in our RADIO DATA CODE MANUAL. Fully automatic SELCAL, operation and mailbox services are already available at totally computerized coast stations such as Mobile R, USA. Several coast stations use certain frequencies exclusively for broadcasting meteorological and navigational information to ship stations, e.g. Royal Navy (RN) London, G, call sign GYA, with FAX charts on 6452.5 kHz. The rapidly expanding NAVTEX system is described in chapter 12.
- Ship stations. Example: "Merchant Prelude", BAH, call sign C6BJ4.

2.5.4 Radiodetermination/location/navigation services

These services allow the determination of the position, velocity etc. of mobile stations such as an aircraft or a ship for navigational or other purposes. Typical stations in these services are

- Beacon stations. Example: Non-directional radio beacon (NDB) Cochabamba, BOL, characteristic signal 'CBB', on 1648.5 kHz. This station continuously transmits dashes and its characteristic signal, enabling an aircraft to determine its bearing or direction in relation to the NDB.
- Direction-finder calibration stations. Example: Kiel Phare, D, characteristic signal 'KB', on 2168.0 kHz. This station transmits dashes and its characteristic signal only upon request by a ship.
- Direction-finding stations. Example: Blavand Gonio, DNK, call sign OXB, on 1813.0 kHz. A ship calls on a separate calling frequency. After contact has been established, it transmits the signals necessary for taking bearings sometimes on another separate frequency. The gonio station transmits its bearings on the frequency mentioned.
- Navigation system stations. These stations transmit pulses according to a fixed time cycle which is different for every station in a radionet. The reception of at least two stations in combination with computer processing allows a mobile station to determine its position. Example 1: Long range navigation system (LORAN) Sheyang, CHN, no call sign used, on 1950.0 kHz. Example 2: OMEGA Le Port, REU, no call sign used, on 13.6 kHz.

Radiodetermination/location/navigation stations are not included in the frequency list (chapter 3.3) because the information transmitted is of interest to a mobile station only and not to a radio monitor. Furthermore, as described above, many stations transmit only upon request and not continuously. One exception: the single-letter beacon stations from CIS are listed because they transmit continuously and may be used by radio monitors for radio propagation checks.

2.5.5 Standard frequency and time signal service

This service provides the transmission of specified frequencies, e.g. 10 MHz, and time signals, or both, of high precision for general reception. It meets the needs of time reference of a wide class of users in defence, educational, governmental and industrial establishments and of navigational and scientific purposes. The reference frequency is normally a cesium beam frequency standard. The Bureau International des Poids et des Mesures (BIPM) at Paris, F, maintains the International Atomic Time (IAT) and, consequently, the UTC time scale.

Time signals consist of one pulse per second with uniform length, with the first pulse in every minute being doubled, omitted, prolonged or shortened. The value of DUT1, i.e. the difference of the time scale UT1 based on the rotation of the Earth to the UTC, is indicated by a group of similarly marked second pulses. Several stations transmit a time code in Binary Coded Decimal (BCD) enabling a direct readout of the year, month, day, hour, minute, second and day of the week after computer processing.

An example of a standard frequency and time signal station is Taejon, KOR, call sign HLA, on 2.5 and 5 MHz.

2.6 Modulation types

Please refer to chapter 17 for the designation of emissions according to the RRs. These are not used in the frequency list (chapter 3) because we believe that e.g. the term COMB is more convenient than B9W. For the identification and description of 63 different emissions you may use our COMPACT CASSETTE RECORDING OF MODULATION TYPES. 71 examples of all conventional and exotic radio communication systems found nowadays on HF can be found on our unique COMPACT DISC (CD) RECORDING OF MODULATION TYPES. If you have access to a Digital Audio Tape (DAT) recorder you could record new teleprinter systems etc. that are *not* yet included on our MODULATION TYPE RECORDINGS (see the lists at the end of this book), and you could send a DAT copy to us for further examination. Your cooperation will be highly appreciated.

2.6.1 **CW** (emission designations: A1A, A2A, F1A)

Transmissions in Morse code are still used in the fixed service mainly by national and regional military and police radio networks. In the MMS it continues to be the cheapest way of installing the necessary radiocommunications equipment on board a sea-going ship, because not every shipping company - think of those flags of convenience - can afford SITOR equipment. Among other radio services and station types, traditional CW is dying out.

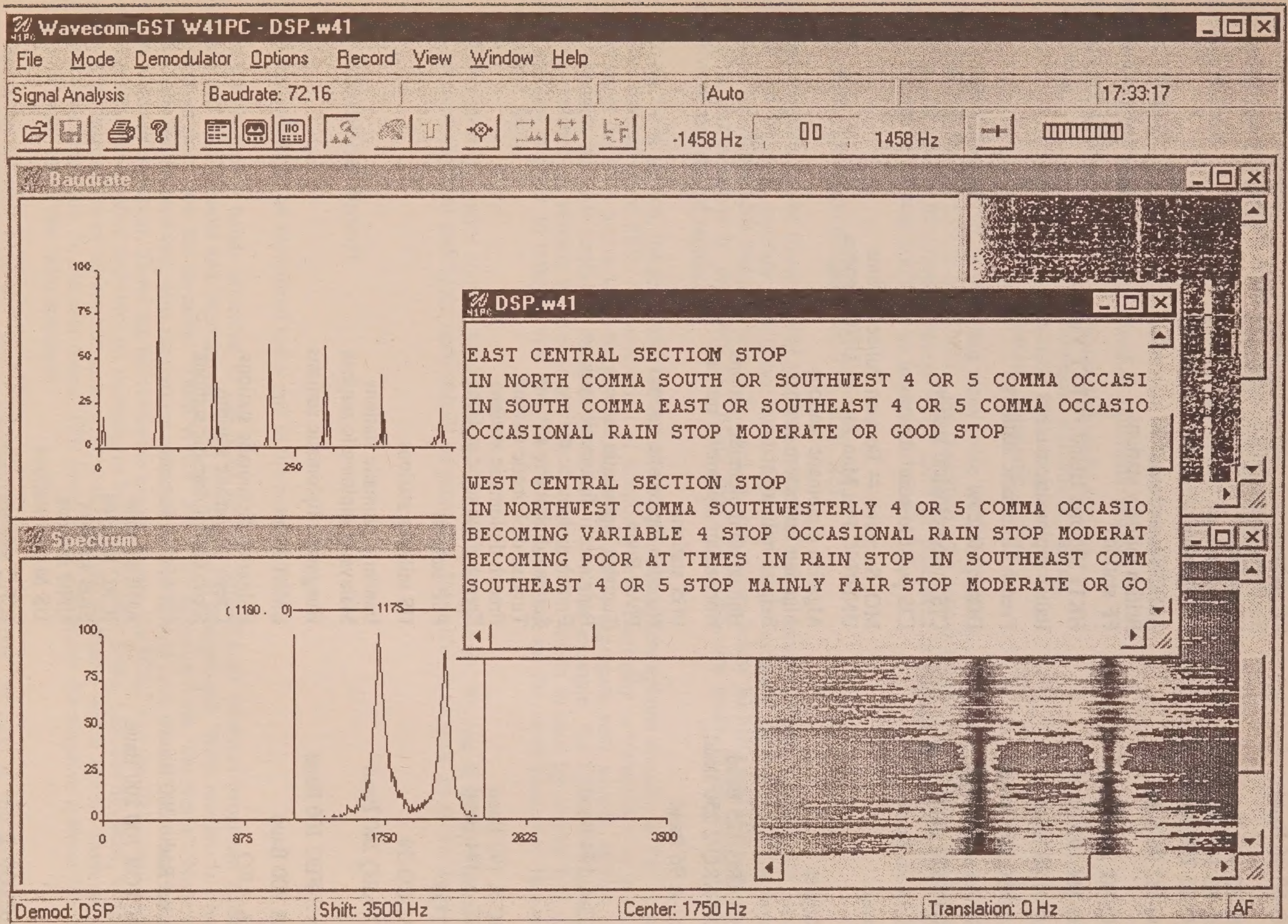
2.6.2 **FAX** (emission designations: F1C, F2C, F3C, J2C, J3C, R3C)

With the availability of reliable and easy-to-use FAX converters at reasonable prices, this mode enjoys great popularity among mariners, yachtsmen, pilots, radio amateurs, monitors and meteorologists. For detailed information about this subject please refer to our GUIDE TO WORLDWIDE WEATHERFAX SERVICES.

2.6.3 **RTTY** (emission designations: F1B, F7B)

Business telegrams, clear language maritime weather forecasts, crew lists, departure messages, drilling results from offshore oil rigs, encoded meteo bulletins, encrypted diplomatic traffic, flight plans, ICRC messages, INTERPOL warrant lists, maritime traffic lists, military orders, navigational warnings, press broadcasts, UNO situation reports, waybills for shipload - virtually everything is present today in written form and must be transmitted from one point to another. Consequently, RTTY is the mode of the future. We have been aware of this trend in time and have published our famous lists and manuals, with the emphasis on RTTY, for 28 years. For telex service codes and abbreviations please refer to chapter 23. You are certainly familiar with the common ITA2 and SITOR teleprinter systems and their derivates such as the Arabic, Cyrillic or Korean alphabet. Thousands of frequencies of stations using the following advanced teleprinter systems can be found in chapter 3 (this list does not include VFT which is a modulation type and not a teleprinter system!):

ALIS 228.7 Baud	German diplomatic stations IFG stations, Italian diplomatic stations
ALIS-2 241 Baud	German diplomatic stations UNO stations
ARQ-E 48 Baud	FF stations
ARQ-E 50 Baud	FF stations
ARQ-E 72 Baud	BGS stations FF stations German police stations ⇄ MOI Bonn
ARQ-E 86 Baud	German police stations ⇄ MOI Bonn
ARQ-E 96 Baud	BNDVB Athens ⇄ BNDVB Bonn FF stations German diplomatic stations German police stations ⇄ MOI Bonn Italian diplomatic stations MOSSAD San'a ⇄ MOSSAD Tel Aviv MOSSAD/SOUD Moscow ⇄ MOSSAD Tel Aviv MOSSAD Tel Aviv ⇄ SISMI Udine
ARQ-E 184 Baud	FF stations
ARQ-E 192 Baud	BNDVB Bonn ⇄ MOSSAD Tel Aviv German diplomatic stations MOSSAD San'a ⇄ MOSSAD Tel Aviv MOSSAD Tel Aviv ⇄ SISMI Udine
ARQ-E 288 Baud	BNDVB Bonn ⇄ MOSSAD Tel Aviv INTEL T'ai-pei
ARQ-E3 48 Baud	ASECNA stations, Plaisance Air FF stations


Wavecom-GST W41PC - DSP.w41
File
Mode
Demodulator
Options
Record
View
Window
Help
Signal Analysis
Baudrate: 72.16
Auto
17:33:17
-1458 Hz
1458 Hz
Baudrate
100
75
50
25
0
0
250
Spectrum
(1180 . 0)
1175
100
75
50
25
0
0
875
1750
2625
3500
DSP.w41
Demod: DSP
Shift: 3500 Hz
Center: 1750 Hz
Translation: 0 Hz
AF

```
EAST CENTRAL SECTION STOP
IN NORTH COMMA SOUTH OR SOUTHWEST 4 OR 5 COMMA OCCASI
IN SOUTH COMMA EAST OR SOUTHEAST 4 OR 5 COMMA OCCASIO
OCCASIONAL RAIN STOP MODERATE OR GOOD STOP

WEST CENTRAL SECTION STOP
IN NORTHWEST COMMA SOUTHWESTERLY 4 OR 5 COMMA OCCASIO
BECOMING VARIABLE 4 STOP OCCASIONAL RAIN STOP MODERAT
BECOMING POOR AT TIMES IN RAIN STOP IN SOUTHEAST COMM
SOUTHEAST 4 OR 5 STOP MAINLY FAIR STOP MODERATE OR GO
```

Screenshot of a *really* modern data decoder system (WAVECOM W41PC DSP, see pages 578 - 582)

ARQ-E3 96 Baud	FF stations Southern Ocean DTRE stations ⇄ MFA Paris
ARQ-E3 100 Baud	FF stations
ARQ-E3 192 Baud	FF stations
ARQ-E3 200 Baud	FF stations
ARQ-M2 96 Baud	ASECNA stations British military stations
ARQ-M2 200 Baud	FF stations
ARQ-M4 192 Baud	HKTI Victoria Island ⇄ PTT Vientiane
ARQ-N 96 Baud	Italian diplomatic stations
ARQ6-90 200 Baud	French diplomatic stations
CIS 10-11-11 MFSK	DOSC Moscow
CIS-11 100 Baud	CIS meteorological stations
CIS-14 96 Baud	CIS point-to-point stations
Clover	MOI Sarajevo ⇄ Bosnian Police stations UNNNSC Pan Mun Jom ⇄ UNO Geneva
Coquelet	Algerian diplomatic stations Algerian Prefecture stations Belgian military stations
DUP-ARQ 125 Baud	Hungarian diplomatic stations
DUP-ARQ-2 250 Baud	Norwegian diplomatic stations
FEC-A 96 Baud	BGS stations Nigerian diplomatic stations PIAB Bonn Tunisian diplomatic stations
FEC-A 144 Baud	Bangladeshi diplomatic stations French diplomatic stations Serbian diplomatic stations Turkish diplomatic stations
FEC-A 192 Baud	French diplomatic stations
FEC-A 384 Baud	French diplomatic stations
G-TOR	PSF stations
HARCO-39	US military stations
HC-ARQ 240 Baud	Iranian diplomatic stations Malaysian diplomatic stations
HNG-FEC 100 Baud	Hungarian diplomatic stations
IRA 200 Baud	BMPT Bonn
IRA-ARQ	Bulgarian diplomatic stations Czech diplomatic stations Slovakian diplomatic stations
Packet Radio 300 Baud	US MARS stations
PACTOR 100 200 Baud	AHE stations ICRC stations SKH stations UNO stations US MARS stations
PACTOR-2	ICRC stations
Piccolo	Australian military stations British military stations

POL-ARQ 100 200 Baud	Polish diplomatic stations
RUM-FEC 164 218 Baud	Romanian diplomatic stations
SI-ARQ 96 Baud	Austrian diplomatic stations Indonesian diplomatic stations
SI-FEC 96 Baud	Indonesian diplomatic stations
SWED-ARQ 100 Baud	Swedish diplomatic stations
TWINPLEX SITOR-A 100 Baud	Danish diplomatic stations Norwegian diplomatic stations Pakistan diplomatic stations Spanish diplomatic stations

Detailed information on these and many more RTTY alphabets, codes and systems can be found in our RADIO DATA CODE MANUAL. We cooperate with certain monitoring services that are able to receive and decode teleprinter systems which can't be processed in popular decoders readily available on the market. Please don't ask us for specific details.

2.6.4 **SSB** (emission designations: J3E, H3E, R3E)

SSB transmissions can be found mainly in the aeronautical mobile service (AMS), in the MMS, and in national and regional military and police nets. Contrary to the amateur service where a strange agreement prescribes LSB transmissions to be used on frequencies below 10 MHz and USB above this limit, SSB transmissions in the AMS and MMS frequency bands are made in the USB mode irrespective of any absurd regulations.

In the fixed service, the remainders of the NTAs' overseas radiotelephone circuits on SW normally do not transmit pure SSB. A combination of telephony and telegraphy is transmitted with e.g. a voice channel on USB and a voice-frequency telegraphy (VFT) aggregate with several narrow shift RTTY channels on LSB (emission designation: B9W). If, in this example, the LSB VFT aggregate would be replaced by another voice channel, this is ordinary ISB which is used by several broadcast feeder stations in order to transmit two programs at the same time on the same frequency (emission designation: B8E).

Although every major country has developed its own spelling code, the use of the internationally agreed phonetic alphabet and figure code should be promoted. It is given in chapter 15 of this book.

2.7 Situation report

At long last, what can be monitored today and in the near future?

In the frequency bands allocated to the fixed service, virtually all overseas broadcast feeders, telephone and telex circuits and international news agencies have disappeared. What remains is a handful of press services from the so-called "Third World" and a few agencies from "the North". Numerous meteo stations can be received, plus air stations mainly from Africa and Asia the traffic of which includes also meteo information. There are humanitarian organizations, the ICRC and the UNO, and a lot of national military and police radionets on frequencies between 2 and 7 MHz. Last but not least, virtually thousands of frequencies of diplomatic and military stations can be found which benefit from modern microprocessor technique. In the near future, ITU plans block allocations for adaptive systems for flexible and efficient use of the radio spectrum.

This is the situation from the view of a monitoring site in Europe. As soon as you go overseas - and we do this quite regularly, see chapter 1 - it changes dramatically. We have monitored stations and frequencies which will never be received in Europe or America due to propagation conditions, and which have never been monitored, identified and published before. In Madagascar, we found hundreds of local and regional air, company, government and police radionets up to 7 MHz in CW. In Sabah and Sarawak, the Borneo Island states of Malaysia, we found thousands of mini-airline, mining, offshore oil drilling, plantation, shipping, timber, trading and transport company frequencies from all South and South East Asian countries between the Arabian Gulf, Australia and China up to 10 MHz in SSB. Needless to say such frequencies are not registered at the RRB - see under 2.3 above ...

Regarding the frequency bands allocated to the AMS, they are vital all over the world except in Europe and North America where communications are on very high frequencies (VHF) and ultra high frequencies (UHF). With the current increase of air traffic - Singapore Airlines has ordered 30 (!) AIRBUS A340-300 for extended long distance operation to be delivered between 1996 and 1998, plus 8 BOEING 747-400 for delivery between 1996 and 1998 -, the AMS bands will remain of great importance to international civil aviation. The ICAO Special Communications / Operations divisional meeting was held in Montreal in April 1995. While satellite systems recently began providing essential services to civil aviation aircraft, the meeting recognized that HF systems will remain in use well into the next century, either as a backup for the Aeronautical Mobile Satellite Service (AMSS) or in areas where geostationary communication satellites do not provide coverage. A new HF data link system will serve in a role complementary to satellite communications within the new communications, navigation, surveillance and air traffic management (CNS/ATM) concept. The system will not replace HF voice communications, but it will significantly increase the capacity of the spectrum and, consequently, increase the number of frequencies available for regional and domestic use. HF data link modems will use digital processing techniques including forward error correction (FEC), adaptive channel equalization, 16-bit cycle redundancy check and interleaving. Telegraph speeds will range from 150 to 1,800 Baud. The ISO8208 protocol will make the system interoperable with the Aeronautical Telecommunication Network (ATN). From the current 80 % availability with analogue voice communications, the availability of HF digital data communications will increase to 95 % when coverage is provided by two ground stations, and to over 99 % with three stations. A way-point position report can be transmitted via HF data link in 2½ seconds. compared with 1½ minutes required for analogue voice communication. These figures have been confirmed by extensive flight trials that we have monitored already in 1994. Needless to say, we will be the first to decode the new system and publish further details!

In the bands allocated to the fixed service, sophisticated technologies were recently introduced:

- SW digital radiotelephone systems using speech signal encoders (so-called vocoders) with occasional scrambling have been monitored. These operate at 600 or 1200 Baud with error-correction coding for long-range communications using sky-waves. 4800 Baud are used for short-range links using ground waves. The modems applied in these systems are basically the same as those for data transmissions (see below).
- SW digital data transmissions now use data rates of up to 2400 Baud with multi-channel voice-frequency telegraphy (MCVFT) and frequency-division multiplex (FDM) phase-shift keying (PSK). A typical system generates a composite audio signal consisting of a set of 18 tones within the standard SSB bandwidth of 300 to 3000 Hz. 16 of these tones are spaced 110 Hz in the band 935 - 2585 Hz being modulated in differentially encoded quaternary PSK (DE-QPSK) mode at 75 Baud; this gives a total transmission speed of 16 × 2 × 75 = 2400 Baud. A 605 Hz tone is used for the correction of end-to-end frequency errors including any Doppler effect, and an 825 Hz (or 2915 Hz) tone is chosen for system synchronization to avoid excessive loss at the lower (or upper) band edge. Lower data rates such as 1200 or 600 Baud enable dual (2 × 1200) or quadruple (4 × 600) diversity.

In the bands allocated to the MMS, the technological progress is enormous as well:

- Many coast stations have installed SITOR equipment with various degrees of automation. The use of frequency scanning, computer control and message switching techniques has permitted fully automatic establishment of calls from ships to telex subscribers on shore. Mailbox and store-and-forward facilities have enabled automation in the reverse direction. As a result, customers of the new Globe Wireless radio service - needless to say its new coast stations KEJ Hoolehua R, HWA; VCT Tors Cove R, CAN; ZLA Awanui R, NZL; and others, are already listed in the book in hand - are now being charged for messages transmitted instead of connect time. (By the way, correct Internet connection providers do the same and charge transmitted megabytes instead of connect time.) Believe it or not: according to CCIR Recommendation 692, even the MMS has finally realized - after fifteen years of operation in the amateur, diplomatic, fixed and military radio services - that the SITOR teleprinter system allows single-frequency channel operation!

- Currently, the NAVAREA service is being switched to the Maritime Safety Information (MSI) system, using SITOR-B on specified HF frequencies similar to the NAVTEX system on MF. Transmissions are carried out simultaneously in parallel on groups of frequencies in accordance with a schedule. We have monitored trial operational transmissions already in 1991 (see chapter 3)! - and we will of course keep you informed on new transmissions.
- With increased computerization on board high seas ships, there is a need for frequencies for data exchange, using digital transmission techniques, between shore and ship for ship's position and movement data and correction data of radionavigation systems and electronic nautical charts (ENC).

The decreasing importance of Morse telegraphy in favour of RTTY and SSB increases the overloading and resulting interference in the narrow-band direct-printing telegraphy (NBDPT) sub-bands. MOB-87, held at Geneva between 14 September and 17 October 1987, has thus decided on a total review of the MMS bands. The completely new frequency allotment plan came into force in July 1991 and is perfectly integrated in chapter 3. It also includes the new MMS MF frequencies allocated in conformity with the channelling arrangement for Region 1 that entered into force in April 1992.

2.8 Radio frequency spectrum management

2.8.1 The new ITU structure

In 1993, ITU's structure, management practices and working methods were finally adapted to the changes in the world of telecommunications and to the increasing demands placed upon it to keep pace with the ever-accelerating progress in telecommunications. ITU's main areas of activity - development, standardization and radiocommunication - were completely overhauled. However, any such approach to the work of the ITU must recognize that arrangements made to meet today's situation will soon be outdated. A flexible framework has to be established which can be adapted to the as yet unforeseen changes.

On 01 March 1993, the CCIR, the CCITT and the IFRB ceased to exist. The standards-setting activities of the CCIR and the CCITT were consolidated into a Telecommunication Standardization Sector. The rest of the CCIR activities, i.e. essentially those tasks related to the efficient management of the radio-frequency spectrum in terrestrial and space radiocommunications, were integrated into a new Radiocommunication Sector, along with the activities of the IFRB. Together with the Telecommunication Development Sector, these new structures are the pillars on which the future of the ITU is built.

ITU now comprises:

- a Plenipotentiary Conference which is the supreme authority, to be held every four years (e.g. from 19 September to 14 October 1994 in Kyoto), with the focus on long-term policy issues;
- the Council which acts on behalf of the Plenipotentiary Conference;
- a General Secretariat;
- world conferences on international telecommunications;
- a Telecommunication Standardization Sector, including world telecommunication standardization conferences (e.g. that held recently from 09 to 18 October 1996 in Geneva) to study technical, operating, and tariff questions and to issue recommendations on them;
- a Telecommunications Development Sector, including world and regional telecommunication development conferences;
- the Radiocommunication Sector, including World and Regional Radiocommunication Conferences (WRCs and RRCs), Radiocommunication Assemblies (RAs) and a Radio Regulations Board (RRB).
  - WRCs are held every two years along with a RA. The main function of radiocommunication conferences is to review and revise, as necessary, the RRs on the basis of an agenda adopted by the Council following consultation with the membership. Preceded by the first RA from 08 to 16 November 1993, the first WRC took place in Geneva from 15 to 19 November 1993. The agenda for the second WRC from 23 October to 17 November 1995 included the March 1994 report of the Voluntary Group of Experts with proposals that will improve spectrum utilization and simplify the international RRs (see 2.3 above). The preliminary agenda for the 1997 WRC includes an exami-

nation of the use of the HF bands allocated to broadcasting in the light of developments to date, issues related to the implementation of the Global Maritime Distress and Safety System (GMDSS), and the use of Appendix 18 regarding transmitting frequencies for MMS stations.

- RRCs may be held to deal with specific radiocommunication questions of a regional nature.
- The RA carries out the former functions of the CCIR Plenary Assembly, i.e. to provide the technical basis for the work of WRCs, approve the programme of work of radiocommunication study groups and decide on the priority, urgency and time-scale for the completion of their study. The first RA, associated with the WRC mentioned above, took place in Geneva from 08 to 16 November 1993. The second RA took place from 16 to 20 October 1995. The following nine study groups were set up during the first RA:
  1 Spectrum management;
  2 Inter-service sharing and compatibility;
  3 Radio wave propagation;
  4 Fixed-satellite service;
  7 Science Services;
  8 Mobile, radiodetermination, amateur and related satellite services;
  9 Fixed service;
  10 Broadcasting service - sound;
  11 Broadcasting service - television.
- A part-time nine-member RRB replaces the former full-time five-member IFRB. The new RRB approves the rules of procedure which are used in the application of the RRs to register frequency assignments, considers any matter which cannot be resolved through the application of the rules of procedure, and performs any duties related to the assignment and utilization of frequencies and to the equitable utilization of the geostationary-satellite orbit. It also considers the reports of the Director of the Radiocommunication Bureau on investigations, at the request of one or more ITU members, of cases of harmful interferences and formulates recommendations for their resolution.

2.8.2 The new Spectrum Management Information System (SMIS)

Mutual interferences among radio stations impose limits on radiocommunications. Suitable frequency bands are already occupied, and finding a place for a new radio service or radio station is more and more difficult. To continue and develop further radiocommunication services, an efficient radio frequency spectrum management system is necessary. It is the responsibility of each government to eliminate and prevent harmful interference to and from the stations under its authority. As a consequence, most countries have introduced the radio interference issue into their legal systems and developed national radio frequency spectrum management structures.

National spectrum managers are responsible for the satisfaction of conflicting frequency requirements and coordination of the domestic use of the radio frequency spectrum resource. An evaluation of the interference threat to and from a new radio station is an integral part of their function. It requires a detailed examination of the characteristics of the station and its environment. Personal computers (PCs) and workstations have revolutionized the spectrum management. Many countries have found it necessary to develop software tools and data bases for these purposes. The degree of computerization of national spectrum management is increasing rapidly. Recently, even the least developed countries were offered about one hundred PCs for spectrum management applications.

Many countries have to coordinate domestic radio stations with the neighbouring countries, within the coordination ranges reaching thousands of kilometres. Even the largest countries in the world have to coordinate all SW, satellite and other radio stations that use the global radio wave propagation modes. When an international recognition of a station is sought, its frequency and technical assignments have to be coordinated, notified and registered at the ITU headquarters in accordance with the RRs.

The existing international spectrum management system has been created in 1947 to satisfy the basic needs of all ITU member countries. These needs change, following the technological, economical, political and social development, and the system has to change accordingly. With a renaissance of wireless technology, the number of radio stations - operating and planned - is growing. Growing also is the complexity of the coordination process and the volume of coordination data required to ensure their interference-free operation. Management of the radio frequency spectrum becomes increasingly difficult and expensive. On the other hand, we witness economic difficulties, shrinking budgets and competition. As a result, there is increasing pressure on all governments and on the ITU to make better use of the existing resources. The new SMIS will contribute to that aim mainly through a better harmonization and integration of the existing resources, both national and international.

In the absence of an automated system, the manual treatment of required examination and the follow-up actions in the IFRB were time-consuming operations which delayed other activities. During the past decades, we have seen many attempts to improve that situation. Examples are organisational changes, application of computers at the ITU headquarters, provision of data on magnetic tapes, diskettes and CD-ROMs, and recent attempts to simplify the RRs. However, all these efforts did not meet the expectations of ITU members.

The only possibility of improvements, not fully explored until now, is the harmonization and integration of the existing systems and automatic exchange of data. The CCIR-IFRB merging described above cannot produce any practical effect as long as the existing working arrangements among the national spectrum managers and with the ITU remain unchanged. The key element is the data exchange. Substantial improvements in the way the data are exchanged among administrations and with the ITU headquarters are necessary. The aim of the new system is to improve that exchange.

The new SMIS will harmonize national and international radio frequency spectrum management. It will integrate within one computer network the existing resources available in administrations, ITU and other organizations such as non-governmental multinational consortia, service providers, equipment manufacturers and consultants such as Klingenfuss Monitoring Service. The new system will be a network of national and regional computer networks used for spectrum management purposes. Video communication and other auxiliary equipment will be added to facilitate further spectrum management tasks. The system will evolve following the changing requirements, technological developments and available budget. It will allow for the incorporation of new users, new data, new services and new software tools, as required. The SMIS will be maintained by the ITU and will serve as a framework for spectrum management in a national, regional and worldwide scale.

The technical examinations defined in the RRs will be automated. If a potential conflict is detected, the victim parties can automatically be identified. The system will determine who, where, when and how is threatened, and the complete documentation of the interference analyses performed by the system will be available. The necessary coordination and negotiation between the involved parties can start without delay, or the characteristics of stations can be modified and the examination process repeated with the new data. If the results of the examination are positive, and there are no interference threats to third parties, the data of the station can be automatically submitted for the international notification and registration in accordance with the agreed rules.

The SMIS will be implemented in an evolutionary way, step-by-step, in close collaboration with all potential users:

phase 1: • read-only access to the existing ITU data bases;
phase 2: • standard data structures for selected services agreed;
• read-and-write access to the existing ITU data bases for selected services;
• automatic submission of notifications for selected services (such as satellite and SW);
• automatic submission of modifications for selected frequency plans;
phase 3: • standard structure of electronic maps agreed;
• electronic maps for selected regions created;
phase 4: • standard models and criteria for selected services agreed;
• automatic trial examinations allowed with the existing ITU data bases;
phase 5: • harmonization and integration of national data bases;
• new system data base created;
• automatic exchange of data and updating of the system data bases;
• further development of the system.

The implementation of the SMIS can also be initiated in an individual country or region, where conditions are favourable and specific problems need to be solved without delay. European countries may wish to interconnect directly their national systems, as they are well developed and have much in common. The South American countries may prefer to begin with the electronic maps of the region, as they need them urgently. In any case, it is extremely important to avoid any further fragmentation of existing spectrum management systems. The new SMIS will be a major project which will change dramatically the way ITU members solve the radio frequency spectrum management problems.

A basic computerized system to be introduced in spectrum management on the national level is needed first, for developing countries in particular. Such a basic automated spectrum management system (BASMS) is currently being developed by the private company Advanced Spectrum Research. BASMS will be available in English and at a later stage in French and Spanish. The extensive training programme started with a Beta Testing and Training Meeting at ITU Headquarters from 28 August to 01 September 1995, and we took part in the first ITU Regional Seminar on BASMS for English-speaking African countries in Nairobi from 28 November to 03 December 1995.

2.9 Equipment

We could write another volume the size of the book in hand to tell you stories about our experience with radio monitoring equipment during the past decades. Furthermore, we could tell you what we use now and advise you to buy exactly the same configuration and you would be satisfied with it. Really? Apart from the fact that equipment manufacturers would certainly not like us to proceed in this way - because every manufacturer is convinced that just his gear is the best available - your needs will be at the least slightly different from ours. While one user of the book in hand sits in his "radio shack" and prints press bulletins in RTTY, the next one sails around the world on his yacht and relies on us for the latest FAX schedules available in order to get his selected wave height prognosis chart. The third one is the chief of staff in the monitoring service of a major country who is overequipped with the most expensive gear available on the professional market, but as he does not know how to operate it the results are miserable ...

According to the situation report above, the most interesting transmissions are mainly in RTTY nowadays, with an increasing tendency towards sophisticated synchronous systems. Next comes FAX and SSB, and finally CW. Therefore, a modern allround monitoring station is composed of the following elements:

- Antenna. The quality of the antenna system is of immense importance for the signal strength. The ideal case is a rotable logarithmic-periodic antenna, which is thus used in many professional plants. At the opposite end of the quality scale is the active antenna of only 1 or 2 m length with an amplifier which will most probably produce its own spurious signals in the HF range. This can be only a patched-up solution, compared with e.g. a 10 or 20 m longwire antenna which should be installed as high as possible. The best semi-professional solution is an array of several dipole and/or longwire antennas, arranged in different directions and connected to an antenna switch for quick selection of the best one for the station monitored.

- Receiver. A general coverage receiver with a continuous frequency range from 150 kHz to 30 MHz is ideal, plus the frequency range from 0 to 150 kHz if you wish to receive that VLF/LF band. The set must have
  - frequency selection by both a rotating tuning knob and a numerical keyboard;
  - frequency band sweeping and memory scanning;
  - digital frequency readout to 0.1 kHz;
  - memory with a capacity of at least 50 channels;
  - modes AM, CW, LSB and USB; FAX and RTTY are not necessary;
  - bandwidths of at least 0.5, 1, 2 and 4 kHz, independently switchable of the selected mode;
  - signal strength meter;
  - pass band tuning (PBT);
  - beat frequency oscillator (BFO) - not necessary with a good PBT system;
  - audio frequency (AF) and radio frequency (RF) gain controls;
  - automatic gain control (AGC) switchable off, fast and slow;
  - switchable noise blanker;

- double or triple superheterodyne technique with the first intermediate frequency (IF) higher than 30 MHz;
- excellent image and intermediate frequency rejection;
- excellent selectivity, sensitivity and stability;
- coaxial antenna input;
- line or recording output for connecting FAX and RTTY converters; an IF output is superfluous;
- speaker and headphones AF output;
- power supply 120/240 V AC and 12 V DC;
- good instruction manual with circuit diagrams.

The following additional features are useful:

- receiver incremental tuning (RIT);
- notch filter;
- switchable preamplifier to fight signal loss with narrow bandwidths such as 0.3 kHz;
- antenna switch for selecting between at least two different antennas;
- clock and timer functions;
- tone control.

▪ RTTY data decoder (DD). [Unexperienced radio monitors **beware!** Certain self-appointed "standard" decoders that are currently sweeping the amateur market feature totally inadequate software that will apparently "identify" digital data signals at random and make you believe that your equipment is perfectly "synchronized" to some obscure teleprinter system when it actually is **not!** For really reliable equipment see e.g. *http://ourworld.compuserve.com:80/homepages/wavecom/* and *http://www.universal-radio.com/*]. The set must have

- several systems at various telegraph speeds:
  - International Telegraph Alphabet 2 (ITA2) at 45, 50, 75, 100, 120, 150 and 200 Baud; bit inversion is not necessary;
  - IRA (ITA5, ASCII) at 110 150 200 300 600 Baud;
  - multiplex ARQ-M systems according to CCIR 242-2 and 342-3 at 2-channels 96 and 200 Baud and 4-channels 192 Baud with automatic selection of an active data channel;
  - one-way traffic forward error correction FEC-A system at variable speeds between 96 and 192 Baud;
  - single-channel ARQ-E and ARQ-E3 systems at variable speeds between 48 and 288 Baud;
  - SITOR according to CCIR 476-4 (mode A = ARQ, mode B = FEC) with switchable automatic mode selection at 100 Baud;
  - Packet Radio at 300 Baud;
  - PACTOR at 100 and 200 Baud;
- automatic speed measurement with very high precision to identify single stations in a radionet;
- fixed shifts at 170, 425 and 850 Hz; variable shift between 70 and 1000 Hz;
- automatic shift tuning;
- light-emitting diodes (LED) tuning display;
- switchable unshift-on-space (USOS) function;
- switchable mark-only/space-only function;
- AF input from the receiver's line or recording output;
- standard video monitor output;
- parallel (Centronics) printer output;
- mark and space output to a tuning oscilloscope.

The following additional features are useful:

- CW decoding at 30 to 200 characters per minute, although we recommend you to learn to read Morse code signals yourself because the DD cannot copy disturbed or bad handkeyed signals;
- decoding of various additional synchronous RTTY systems, such as ALIS, ALIS-2, ARQ-N, ARQ-6, AUTOSPEC, CIS-11, CIS-14, Coquelet, DUP-ARQ, DUP-ARQ-2, DUP-FEC-2, G-TOR, HC-ARQ, HNG-FEC, PACTOR-2, Piccolo, POL-ARQ, RUM-FEC, SI-ARQ, SI-FEC, SPREAD, SWED-ARQ and TWINPLEX;
- parameter memory with a capacity of at least 10 channels;
- programmable SELCAL memory with a capacity of at least 5 channels;
- autocorrelation analysis;
- bit/code/signal analysis with code check and shift display.

According to recently compiled statistics - you can easily duplicate it by means of chapter 3 - , out of all *non*-ITA2 50 Baud teleprinter signals of utility stations monitored here, there is

- 50 % SITOR-A and SITOR-B;
- 13 % ITA2 75 Baud;
- 6 % VFT;
- 5 % ARQ-E;
- 3 % each ARQ-E3, ARQ-M, FEC-A, ITA2 100 Baud, and PACTOR;
- 2 % and less of all other teleprinter systems each.

We arrive at the quite interesting conclusion that, with a basic decoder covering ARQ-E, ARQ-E3, ARQ-M, FEC-A, ITA2, PACTOR, SITOR and VFT, you will be able to monitor around 95 % of all teleprinter systems decodable nowadays with readily available equipment. Please be aware of the fact that this restriction does *not* mean 95 % of all *audible* teleprinter signals!

- RTTY tuning oscilloscope. This a must for tuning weak PACTOR and SITOR signals and for narrow shift signals, e.g. a single 70 or 85 Hz shift channel out of a multi-channel VFT aggregate. The cathode ray tube (CRT) should have a diameter of 3 cm or more.

- Video monitor. The CRT must have a diameter of at least 25 cm. All connecting cables must be double shielded in order to reduce HF interference going into the receiver.

- Printer. You can use any printer from the PC market if its input connects to the printer output of the RTTY DD.

- FAX converter. Modern sets connect directly to a PC printer mentioned above. The set must have

  - scanning line frequencies 60, 90 and 120 rpm;
  - automatic and manual synchronization;
  - scanning line densities index of cooperation (IOC) 288 and 576;
  - automatic and manual IOC selection;
  - switchable scanning direction and polarity;
  - AF input from the receiver's line or recording output;
  - parallel (Centronics) printer output.

  The following additional features are useful:

  - scanning line frequency 240 rpm;
  - switchable status line or time print.

You may consider the additional installation of the following elements:

- Headphones. The use of headphones reduces noise pollution in your environment and enables you to concentrate on barely audible signals.

- Tape recorder enables you to reproduce a disturbed signal and modify it with e.g. an external notch and peak filter system for reducing or eliminating interference. You can record RTTY transmissions and FAX pictures as well. A DAT recorder could provide excellent reference signals.

- PC system. With appropriate interfaces, this can be used for processing CW, FAX and RTTY signals; there is a wide range of commercial and free software available on the market. Modern receivers have interfaces which enable the control of the receiving frequency, bandwidth, mode etc., plus memory and scan functions, by a personal computer. Latest developments integrate the hardware of a general coverage receiver on a plug-in PC board. However, this is the very last item on our equipment list, because it is often impossible to operate a microcomputer system near a receiver. No matter what type of system you use and how much you spend on the shielding of cabinets and cables, there will often remain enough HF interference - if not from the computer itself, then from the interface - to drive you up the wall when you try to monitor that interesting weak station ...

You will find hyperlinks to leading equipment dealers, manufacturers and suppliers on our superb Internet World Wide Web site *http://ourworld.compuserve.com/homepages/Klingenfuss/* .

And now, sit back, relax ... and enjoy shortwave! ☺

3 Frequency list of utility stations

3.1 Introduction

Listed are

- frequency in kHz. In the case of RTTY stations, the frequency measured is always f_0 for the F1B, R7B and B9W modulation types, and the exact single channel f_0 frequency in the case of J9W - see chapter 16 in our RADIO DATA CODE MANUAL;
- call sign (apostrophe indicates routing indicator, or call sign not in compliance with official ITU allocations);
- name of the station, and ITU country/geographical symbol;
- type(s) of modulation used, and - if applicable - the corresponding return frequency. In the case of FAX and RTTY stations, this column includes details of the traffic monitored, i.e. the type of information at the time heard (see below). All times are UTC.

Not listed are

- amateur stations;
- broadcasting stations;
- military stations using tactical call signs, or operating only during the term of an exercise, as well as "number" stations and similar never-identifiable nonsense;
- mobile stations, i.e. aircraft, ships, etc.

As the primary interest nowadays is for **RTTY stations**, they are emphasized by **bold type**. *FAX stations* are accentuated by *italic type*. Frequencies for COMMON USE are printed in SMALL CAPITALS. The Frequency Allocations Information for each band in the frequency list is double underlined.

For RTTY stations, the teleprinter system name, telegraph speed, etc. are indicated at the beginning of column 4. Examples are teleprinter systems such as ALIS, ALIS-2, ARQ-E, ARQ-E3, ARQ-M, ARQ-N, ARQ6, AUTOSPEC, CIS 10-11-11 MFSK, CIS-11, CIS-14, Clover, DUP-ARQ, DUP-ARQ-2, DUP-FEC, FEC-A, G-TOR, HARCO-39, HC-ARQ, HNG-FEC, IRA, IRA-ARQ, ITA2, MFSK (Coquelet/Piccolo), NAVTEX, Packet Radio, PACTOR, PACTOR-2, POL-ARQ, RUM-FEC, SI-ARQ, SI-FEC, SITOR, SWED-ARQ and TWINPLEX; telegraph speeds (modulation rates) such as 50, 75, 96 or 144 Baud; and modulation types other than the standard F1BBN (such as VFT). In the case of ARQ-M stations, "A", "B", "C" and "D" indicate the respective data channel. The three-letter group in [brackets] in column 4 is the channel indicator.

In this connection, it should be noted that there is still considerable confusion among radio monitors and would-be experts about the correct application of the terms AMTOR, ARQ, FDM, SITOR, TDM, TOR, VFT, etc. The reason is the ignorance of the situation in commercial telecommunication and professional monitoring. Logically, you cannot use terms such as ARQ, FDM, FEC or TDM for one single RTTY system because they designate only generic error correction methods or multiplexing techniques which are used in many RTTY systems. The standard RTTY system names used throughout our publications were decided in 1988 at a summit meeting here in Tübingen between the world's top decoder manufacturer, representatives of major monitoring services, and ourselves. Consequently, competitive manufacturers and publishers are strongly advised to finally adopt our standards in order to bring to an end the catastrophic confusion of their customers by using e.g. several curious terms such as "ARQ-28", "TDM2", "96-TDM", etc. for the very same ARQ-M2 system. For detailed explanations please refer to our RADIO DATA CODE MANUAL. What's more, certain self-appointed "standard" decoders that are currently sweeping the amateur market will certainly not help with this situation: that type of totally inadequate software will apparently "identify" digital data signals at random and make you believe that your equipment is perfectly "synchronized" to some obscure teleprinter system. Unexperienced radio monitors **beware!**

Furthermore, VFT (and not "FDM") is the correct designation for a special multi-channel teleprinter modulation type, independent of the teleprinter system(s) used for the individual channels (which might be standard RTTY as defined above, or any FDM or TDM technique). As an example, take the GXQ emission around the assigned frequency of 12115.0 kHz, consisting of an LSB voice channel on 12115.00 kHz and a complex VFT aggregate combining several VFT teleprinter channels with different techniques: 192 Baud ARQ-M4 with 340 Hz shift each on 12115.68 and 12117.36 kHz, 75 Baud encrypted with 170 Hz shift each on 12116.16, 12116.64 and 12116.88 kHz, and 96 Baud ARQ-M2 with 170 Hz shift each on 12117.60 and 12117.84 kHz.

Unidentified teleprinter system frequencies were monitored in 1996. We have not yet been able to decode these emissions with state-of-the-art equipment such as the latest UNIVERSAL and WAVECOM data decoders. If you have access to a Digital Audio Tape (DAT) recorder, you could record new teleprinter systems etc. that are *not* yet included on our MODULATION TYPE RECORDINGS (see the list on pages 570 - 574), and you could send a DAT copy to us for further examination (no mini discs or standard or digital compact cassettes please!). Your cooperation will be highly appreciated.

For FAX stations, the scanning line frequency (drum speed) and the scanning line density (longitudinal speed, index of cooperation) are given, e.g. FAX 120/576 means 120 rotations per minute and IOC 576. In this connection, "LSB" indicates a station transmitting negative pictures where black and white are interchanged, which must be received on LSB instead of the standard USB in order to achieve correct pictures (if there is no polarity switch on your FAX recorder). "ISD" indicates a station with inverted scanning direction, i.e. commencing in the right-hand top corner of the picture instead of the standard left-hand top corner, which results in a mirror image. "2-panel" indicates a station transmitting two pictures, each covering one half of the picture area, at the same time. The Dollar character $ in column 4 indicates that the corresponding schedule is listed in chapter 11.

In the case of air stations, the three-letter groups in [brackets] in column 4 is the AFTN Circuit Identification (see chapter 9.3 in our RADIO DATA CODE MANUAL).

In the AMS frequency bands, the allotment areas are listed in MWARA/RDARA/VOLMET area order. Example: "10057.0 AMS = CEP, 3A, VAFI" means "the Aeronautical Mobile Service frequency 10057.0 kHz is allocated to MWARA CEP, to RDARA 3A and to VOLMET area AFI". The meaning of these mnemonics is explained in the abbreviations list (chapter 24), and the geographical coverage of these areas is shown on the attached maps.

In the MMS frequency bands, ***scheduled RTTY coast station frequencies*** which are most probably in operation but have not been monitored during the last 12 months are also listed. They are printed in ***bold italic*** type, and the word "scheduled" is written in column 4 instead of traffic details. These entries are not filed in the stations list (chapter 4) or in the call sign list (chapter 7).

If the location of a station had to be abbreviated in order to meet the format requirements, its full name may be looked up in the alphabetical station list (chapter 4).

Example 1: "14564.0 5BC 68 Nicosia R, CYP SSB QSX 16442.0 kHz" means

"Frequency 14564.0 kHz, call sign 5BC 68, station name Nicosia Radio (coastal station), country Cyprus, type of modulation single sideband, corresponding return frequency 16442.0 kHz"

Example 2: "*9430.0 3MA 34 CNA T'ai-pei, TAI FAX 60/288 LSB ISD: 0201-1507 C nx (text)*" means

"Frequency 9430.0 kHz, call sign 3MA 34, station name Central News Agency Inc T'ai-pei, country Taiwan, facsimile station, scanning line frequency 60 rotations per minute, scanning line density (index of cooperation) 288, the station transmits negative pictures where black and white are interchanged, inverted scanning direction, time 0201 - 1507 Coordinated Universal Time, traffic monitored Chinese news (text)"

Example 3: **"10798.3 'RFLI' FF Fort de France, MRT ARQ-E3 96 Bd: 24 h "controle de voie" or msg or msg (5lgs) or msg (F press review) or wx [IRT]"** means

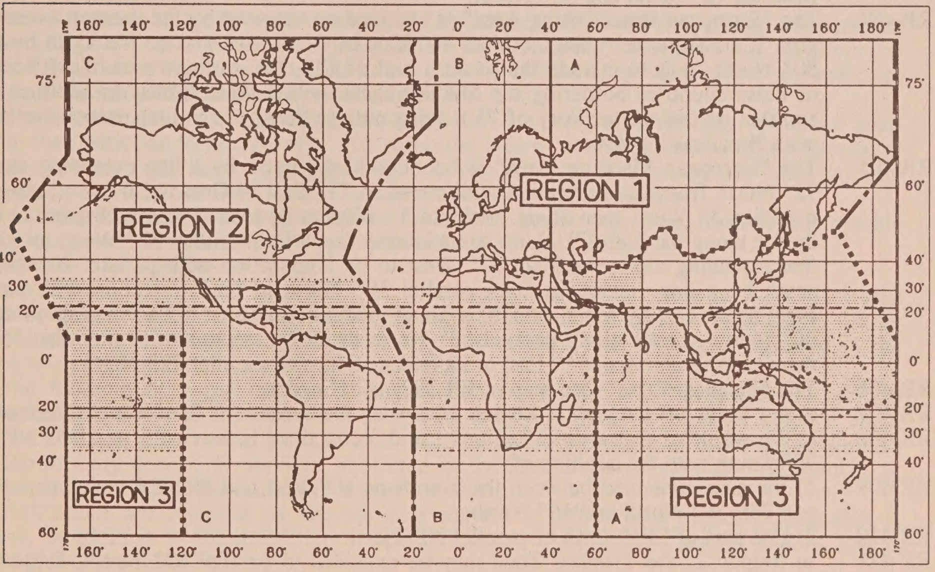
"Frequency 10798.3 kHz, NATO routing indicator RFLI, station name French Forces Fort de France, country Martinique, radioteletype station, single-channel synchronous transmission and automatic repetition teleprinter system with International Telegraph Alphabet 3, speed 96 Baud, time 24 hours, traffic monitored "controle de voie" or message or message (5-letter groups) or message (French press review) or weather, channel indicator IRT"

3.2 Frequency allocations

Note The Frequency Allocations Information is included in the frequency list of utility stations (3.3). It is double underlined and is written on top of each frequency band. The figures attached in <brackets> are the numbers of the respective footnotes. These are listed in 3.4.

Section I - Regions and Areas

RR 392 For the allocation of frequencies the world has been divided into three Regions as shown on the following map and described in RRs 393 to 399 (it should be noted that where the words "regions" or "regional" are without a capital "R" in these Regulations, they do not relate to the three Regions here defined for purposes of frequency allocation):



The shaded part represents the Tropical Zone as defined in RRs 406 to 410 and 411.

RR 393 Region 1 includes the area limited on the east by line A (lines A, B and C are defined below) and on the west by line B, excluding any of the territory of IRN which lies between these limits. It also includes that part of the territory of CIS and TUR lying outside of these limits, the territory of MNG, and the area to the north of CIS which lies between lines A and C.

RR 394 Region 2 includes the area limited on the east by line B and on the west by line C.

RR 395 Region 3 includes the area limited on the east by line C and on the west by line A, except the territories of CIS, MNG, TUR and the area to the north of CIS. It also includes that part of the territory of IRN lying outside of those limits.

RR 396 The lines A, B and C are defined as follows:

RR 397 Line A extends from the North Pole along meridian 40° East of Greenwich to parallel 40° North; thence by great circle arc to the intersection of meridian 60° East and the Tropic of Cancer; thence along the meridian 60° East to the South Pole.

RR 398 Line B extends from the North Pole along meridian 10° West of Greenwich to its intersection with parallel 72° North; thence by great circle arc to the intersection of meridian 50° West and parallel 40° North; thence by great circle arc to the intersection of meridian 20° West and parallel 10° South; thence along meridian 20° West to the South Pole.

RR 399 Line C extends from the North Pole by great circle arc to the intersection of parallel 65°30' North with the international boundary in Bering Strait; thence by great circle arc to the intersection of meridian 165° East of Greenwich and parallel 50° North; thence by great circle arc to the intersection of meridian 170° West and parallel 10° North; thence along parallel 10° North to its intersection with meridian 120° West; thence along meridian 120° West to the South pole.

RR 400 For the purposes of these Regulations, the term "African Broadcasting Area" means:

RR 401 a) African countries, parts of countries, territories and groups of territories situated between the parallels 40° South and 30° North;

RR 402 b) islands in the Indian Ocean west of meridian 60° East of Greenwich, situated between the parallel 40° South and the great circle arc joining the points 45° East, 11°30' North and 60° East, 15° North;

RR 403 c) islands in the Atlantic Ocean east of line B defined in RR 398, situated between the parallels 40° South and 30° North.

RR 404 The "European Broadcasting Area" is bounded on the west by the western boundary of Region 1, on the east by the meridian 40° East of Greenwich and on the south by the parallel 30° North so as to include the western part of CIS, the northern part of ARS and that part of those countries bordering the Mediterranean within these limits. In addition, IRQ, JOR and that part of the territory of TUR lying outside the above limits are included in the European Broadcasting Area.

RR 405 The "European Maritime Area" is bounded to the north by a line extending along parallel 72° North from its intersection with meridian 55° East of Greenwich to its intersection with meridian 5° West, then along meridian 5° West to its intersection with parallel 67° North, thence along parallel 67° North to its intersection with meridian 32° West; to the west by a line extending along meridian 32° West to its intersection with parallel 30° North; to the south by a line extending along parallel 30° North to its intersection with meridian 43° East; to the east by a line extending along meridian 43° East to its intersection with parallel 60° North, thence along parallel 60° North to its intersection with meridian 55° East and thence along meridian 55° East to its intersection with parallel 72° North.

RR 406 The "Tropical Zone" (see map in RR 392) is defined as:

RR 407 a) the whole of that area in Region 2 between the Tropics of Cancer and Capricorn;

RR 408 b) the whole of that area in Regions 1 and 3 contained between the parallels 30° North and 35° South with the addition of:

RR 409 1) the area contained between the meridians 40° East and 80° East of Greenwich and the parallels 30° North and 40° North;

RR 410 2) that part of LBY north of parallel 30° North.

RR 411 In Region 2, the Tropical Zone may be extended to parallel 33° North, subject to special agreements, between the countries concerned in that Region (see Article 7).

RR 412 A sub-Region is an area consisting of two or more countries in the same Region.

Section II - Categories of Services and Allocations

RR 413 **Primary, Permitted and Secondary Services**

RR 414 Where, in the Frequency Allocations Information, a band is indicated as allocated to more than one service, either on a worldwide or Regional basis, such services are listed in the following order:

RR 415 a) services the names of which are printed in "capitals" (example: FIXED); these are called "primary" services;

RR 416 b) services the names of which are printed in "capitals between oblique strokes" (example: /RADIOLOCATION/); these are called "permitted" services (see RR 419);

RR 417 c) services the names of which are printed in "normal characters" (example: Mobile); these are called "secondary" services (see RRs 420 to 423).

RR 418 Additional remarks shall be printed in normal characters (example: MOBILE except aeronautical mobile).

RR 419 Permitted and primary services have equal rights, except that, in the preparation of frequency plans, the primary service, as compared with the permitted service, shall have prior choice of frequencies.

RR 420 Stations of a secondary service:

RR 421 a) shall not cause harmful interference to stations of primary or permitted services to which frequencies are already assigned or to which frequencies may be assigned at a later date;

RR 422 b) cannot claim protection from harmful interference from stations of a primary or permitted service to which frequencies are already assigned or may be assigned at a later date;

RR 423 c) can claim protection, however, from harmful interference from stations of the same or other secondary service (-s) to which frequencies may be assigned at a later date.

RR 424 Where a band is indicated in a footnote as allocated to a service on a "secondary" basis in an area smaller than a Region, or in a particular country, this is a secondary service (see RRs 420 to 423).

RR 425 Where a band is indicated in a footnote as allocated to a service "on a primary basis", or "on a permitted basis" in an area smaller than a Region, or in a particular country, this is a primary service or a permitted service only in that area or country (see RR 419).

RR 426 **Additional Allocations**

RR 427 Where a band is indicated in a footnote as "also allocated" to a service in an area smaller than a Region, or in a particular country, this is an "additional" allocation, i.e. an allocation which is added in this area or in this country to the service or services which are indicated in the Frequency Allocations Information (see RR 428).

RR 428 If the footnote does not include any restriction on the service or services concerned apart from the restriction to operate only in a particular area or country, stations of this service or these services shall have equality of right to operate with stations of the other primary service or services indicated in the Frequency Allocations Information.

RR 429 If restrictions are imposed on an additional allocation in addition to the restriction to operate only in a particular area or country, this is indicated in the footnote.

RR 430 **Alternative Allocations**

RR 431 Where a band is indicated in a footnote as "allocated" to one or more services in an area smaller than a Region, or in a particular country, this is an "alternative" allocation, i.e. an allocation which replaces, in this area or in this country, the allocation indicated in the Frequency Allocations Information (see RR 423).

RR 432 If the footnote does not include any restriction on stations of the service or services concerned, apart from the restriction to operate only in a particular area or country, these stations of such a service or services shall have an equality of right to operate with stations of the primary service or services, indicated in the Frequency Allocations Information, to which the band is allocated in other areas or countries.

RR 433 If restrictions are imposed on stations of a service to which an alternative allocation is made, in addition to the restriction to operate only in a particular country or area, this is indicated in the footnote.

RR 434 **Miscellaneous Provisions**

RR 435 Where it is indicated in these Regulations that a service may operate in a specific frequency band subject to not causing harmful interference, this means also that this service cannot claim protection from harmful interference by other services to which the band is allocated under Chapter III of these Regulations.

RR 436 Except if otherwise specified in a footnote, the term "fixed service", where appearing in Section IV of this Article, does not include systems using ionospheric scatter propagation.

Section III - Description of the Frequency Allocations Information

RR 439 Within each of the categories specified in RRs 415 to 417, services are listed in alphabetical order according to the French language. The order of listing does not indicate relative priority within each category.

RR 440 In the case where there is a parenthetical addition to an allocation in the Frequency Allocations Information, that service allocation is restricted to the type of operation so indicated.

RR 443 In certain cases, the names of countries appearing in the footnotes have been abbreviated in order to shorten the text, using the ITU symbols designating countries or geographical areas (see chapter 24 of this reference book). ☺

3.3 Frequency list

below 9.0 **not allocated** **<444 445>**

9.0 - 148.5 **VARIOUS SERVICES**

18.3		UNID teleprinter	200
19.6		UNID teleprinter	200
21.2		UNID teleprinter	200
23.4		UNID teleprinter	50
50.0	RTZ	Irkutsk TS, SE, RUS	CW
51.9		UNID teleprinter	50
53.0		UNID teleprinter	75
53.6	*RTO*	*Moscow Meteo, RUS*	*FAX $*
60.0	MSF	Rugby TS, G	CW
	WWVB	Fort Collins TS, CO, USA	CW
62.6		UNID teleprinter	200
63.9		UNID teleprinter	200
65.8		UNID teleprinter	200
69.0		UNID teleprinter	50
73.3	MTO 21	RN Crimond, G	ITA2 50 Bd: 0400 tfc
75.0	HBG	Nyon TS, SUI	CW
77.5	DCF 77	Mainflingen TS, D	CW
81.0		UNID teleprinter	50
82.8	MKL	RAF Edinburgh, G	CW
		UNID teleprinter	75
111.3	SOA 211	Warsaw Meteo, POL	ITA2 50 Bd: 24 h ry or wx
118.5	IDQ	IN Rome, I	CW
119.5	SXA	GN Piraeus, GRC	CW
120.9		UNID teleprinter	75
122.3	OUA	DM Stevns, DNK	CW
122.5	CFH	CF Halifax, NS, CAN	ITA2 75 Bd: 24 h wx *FAX $*
122.7	JMC	Tokyo Meteo, J	CW

124.7		UNID teleprinter	MFSK
125.9		UNID teleprinter	75
129.1	DCF 49	BMPT Bonn, D	IRA 200 Bd: 24 h foxes
129.5	SOA 212	Warsaw Meteo, POL	ITA2 50 Bd: 24 h wx
139.0	TBA	TN Ankara, TUR	CW
147.3	DDH 47	Hamburg Meteo, D	ITA2 50 Bd: 0613-2106 ry or wx
147.8		UNID teleprinter	100

1606.5 - 1625.0 Region 1 = MARITIME MOBILE + /FIXED/ + /LAND MOBILE/ <480A 483 484>
Region 2 = BROADCASTING <480 480A>
Region 3 = FIXED + MOBILE + RADIOLOCATION + RADIONAVIGATION <482>

1607.0	Region 1	coast stations, channel 201	QSX 2142.0 kHz
1607.5	Region 1	coast stations, channel 202	QSX 2142.5 kHz
1608.0	Region 1	coast stations, channel 203	QSX 2143.0 kHz
	9AR	*Rijeka R, HRV*	*scheduled*
1608.5	Region 1	coast stations, channel 204	QSX 2143.5 kHz
	SPA	Gdynia R, POL	SITOR-B: 2055 tfc list
1609.0	Region 1	coast stations, channel 205	QSX 2144.0 kHz
1609.5	Region 1	coast stations, channel 206	QSX 2144.5 kHz
	LGB	Rogaland R, NOR	SITOR-A: 0110+2059+2217 tts CW
1610.0	Region 1	coast stations, channel 207	QSX 2145.0 kHz
1610.5	Region 1	coast stations, channel 208	QSX 2145.5 kHz
1611.0	Region 1	coast stations, channel 209	QSX 2146.0 kHz
1611.5	Region 1	coast stations, channel 210	QSX 2146.5 kHz
	LGB	Rogaland R, NOR	SITOR-A: 0100+0556+1538 tts CW
1612.0	Region 1	coast stations, channel 211	QSX 2147.0 kHz
1612.5	Region 1	coast stations, channel 212	QSX 2147.5 kHz
1613.0	Region 1	coast stations, channel 213	QSX 2148.0 kHz
	OXZ	*Lyngby R, DNK*	*scheduled* CW
1613.5	Region 1	coast stations, channel 214	QSX 2148.5 kHz
1614.0	Region 1	coast stations, channel 215	QSX 2149.0 kHz
	9AR	*Rijeka R, HRV*	*scheduled*
1614.5	Region 1	coast stations, channel 216	QSX 2149.5 kHz
1615.0	Region 1	coast stations, channel 217	QSX 2150.0 kHz
	SVU	*Athens R, GRC*	*scheduled*
1615.5	Region 1	coast stations, channel 218	QSX 2150.5 kHz
	SVH	*Iraklion R, GRC*	*scheduled*
1616.0	Region 1	coast stations, channel 219	QSX 2151.0 kHz
1616.5	Region 1	coast stations, channel 220	QSX 2151.5 kHz
1617.0	Region 1	coast stations, channel 221	QSX 2152.0 kHz
1617.5	Region 1	coast stations, channel 222	QSX 2152.5 kHz
	SPB	*Szczecin R, POL*	*scheduled*
		UNID teleprinter	75
1618.0	Region 1	coast stations, channel 223	QSX 2153.0 kHz
1618.5	Region 1	coast stations, channel 224	QSX 2153.5 kHz
1619.0	Region 1	coast stations, channel 225	QSX 2154.0 kHz
1619.5	Region 1	coast stations, channel 226	QSX 2154.5 kHz
	PCH 85	Scheveningen R, NLD	SITOR-A: 1740-0410 tts CW
1620.0	Region 1	coast stations, channel 227	QSX 2155.0 kHz
1620.5	Region 1	coast stations, channel 228	QSX 2155.5 kHz
1621.0	Region 1	coast stations, channel 229	QSX 2156.0 kHz
	LZW 11	*Varna R, BUL*	*scheduled*

1621.5	Region 1	coast stations, channel 230	QSX 2156.5 kHz
	LFO	*Oerlandet R, NOR*	*scheduled*
	LGL	*Floroe R, NOR*	*scheduled*
	LGN	*Bergen R, NOR*	*scheduled*
	LGP	*Bodoe R, NOR*	*scheduled*
	LGQ	*Rogaland R, NOR*	*scheduled*
	LGS	*Svalbard R, Spitsbgn., NOR*	*scheduled*
	LGT	*Tjoeme R, NOR*	*scheduled*
	LGV	*Vardoe R, NOR*	*scheduled*
	LGZ	*Farsund R, NOR*	*scheduled*
	LMJ	*Jan Mayen R, NOR*	*scheduled*
1622.0	Region 1	coast stations, channel 231	QSX 2157.0 kHz
1622.5	Region 1	coast stations, channel 232	QSX 2157.5 kHz
	HZG	*Dammam R, ARS*	*scheduled*
1623.0	Region 1	coast stations, channel 233	QSX 2158.0 kHz
1623.5	Region 1	coast stations, channel 234	QSX 2158.5 kHz
1624.0	Region 1	coast stations, channel 235	QSX 2159.0 kHz
1624.5	Region 1	coast stations, channel 236	QSX 2159.5 kHz
	OXJ	*Torshavn R, Faroe Is., DNK*	*scheduled*

1625.0 - 1635.0

Region 1 = RADIOLOCATION <485 486 487>
Region 2 = BROADCASTING + /FIXED/ + /MOBILE/ + Radiolocation <480 480A
Region 3 = FIXED + MOBILE + RADIOLOCATION + RADIONAVIGATION <482>

1635.0 - 1705.0

Region 1 = MARITIME MOBILE + /FIXED/ + /LAND MOBILE/ <480A 483 484 488>
Region 2 = BROADCASTING + /FIXED/ + /MOBILE/ + Radiolocation <480 480A>
Region 3 = FIXED + MOBILE + RADIOLOCATION + RADIONAVIGATION <482>

1635.0	Region 1	coast stations, ch 241	SSB	QSX 2060.0 kHz
	FFD	Saint Denis R, REU		
	HZG	Dammam R, ARS		
	LGV	Vardoe R, NOR		
1638.0	Region 1	coast stations, ch 242	SSB	QSX 2063.0 kHz
	OHG	Helsinki R, FIN		
	SUK	Quseir R, EGY		
	SVX	Chios R, GRC		
1641.0	Region 1	coast stations, ch 243	SSB	QSX 2066.0 kHz
	GNI	Niton R, G		
	HZG	Dammam R, ARS		
	OXJ	Torshavn R, Faroe Is., DNK		
	9AR	Rijeka R, HRV		
1644.0	Region 1	coast stations, ch 244	SSB	QSX 2069.0 kHz
	EJM	Malin Head R, IRL		
		Arrecife R, CNR		
1647.0	Region 1	coast stations, ch 245	SSB	QSX 2072.0 kHz
1650.0	Region 1	coast stations, ch 246	SSB	QSX 2075.0 kHz
	ESP	Pärnu R, EST		
	IPP	Palermo R, I		
	TFA	Reykjavik R, ISL		
	5VA	Lome R, TOG		
1653.0	Region 1	coast stations, ch 247	SSB	QSX 2078.0 kHz
	LFO	Oerlandet R, NOR		

1653.0	LGN	Rogaland R, NOR		
1656.0	Region 1	coast stations, ch 248	SSB	QSX 2081.0 kHz
	IQN	Lampedusa R, I		
	9AR	Rijeka R, HRV		
		Chipiona R, E		
1659.0	Region 1	coast stations, ch 249	SSB	QSX 2084.0 kHz
	LGP	Bodoe R, NOR		
	SVX	Chios R, GRC		
	TFT	Hornafjoerdur R, ISL		
	3VZ	Zarzis R, TUN		
		Saint Helier R, Jersey, G		
1662.0	Region 1	coast stations, ch 250	SSB	QSX 2087.0 kHz
	IQA	Augusta R, I		
	LZL	Bourgas R, BUL		
1665.0	Region 1	coast stations, ch 251	SSB	QSX 2090.0 kHz
	LGT	Tjoeme R, NOR		
	LZW 12	Varna R, BUL		
	OSU	Oostende R, BEL		
1668.0	Region 1	coast stations, ch 252	SSB	QSX 2093.0 kHz
1671.0	Region 1	coast stations, ch 253	SSB	QSX 2096.0 kHz
	FFU	Brest - Le Conquet R, F		
	LGZ	Farsund R, NOR		
	OHG	Helsinki R, FIN		
	3VS	Sfax R, TUN		
1674.0	Region 1	coast stations, ch 254	SSB	QSX 2099.0 kHz
	LGV	Vardoe R, NOR		
	PCG	Scheveningen R, NLD		
	SDJ	Stockholm R, S		
	9GX	Tema R, GHA		
1677.0	Region 1	coast stations, ch 255	SSB	QSX 2102.0 kHz
	EAS	Cabo Penas R, E		
	EJM	Malin Head R, IRL		
	OFH	Mariehamn R, FIN		
1680.0	Region 1	coast stations, ch 256	SSB	QSX 2105.0 kHz
	LGL	Floroe R, NOR		
	SUK	Quseir R, EGY		
1683.0	Region 1	coast stations, ch 257	SSB	QSX 2108.0 kHz
	OSU	Oostende R, BEL		
1686.0	Region 1	coast stations, ch 258	SSB	QSX 2111.0 kHz
	FFO	Saint Nazaire R, F		
	LZW 13	Varna R, BUL		
	3VB	Bizerte R, TUN		
1689.0	Region 1	coast stations, ch 259	SSB	QSX 2114.0 kHz
	EAL	Las Palmas R, CNR		
	OSU	Oostende R, BEL		
1692.0	Region 1	coast stations, ch 260	SSB	QSX 2117.0 kHz
	FFB	Boulogne-sur-Mer R, F		
	LGQ	Rogaland R, NOR		
	SPC	Gdynia R, POL		
	UXL	Kherson R, UKR		
1695.0	Region 1	coast stations, ch 261	SSB	QSX 2120.0 kHz
	LGV	Vardoe R, NOR		
	SVN	Athens R, GRC		
	3VM	Mahdia R, TUN		
1696.0	SVK	Kerkyra R, GRC	SSB	
1698.0	Region 1	coast stations, ch 262	SSB	QSX 2123.0 kHz
		La Coruna R, E		
1701.0	Region 1	coast stations, ch 263	SSB	QSX 2126.0 kHz
1704.0	Region 1	coast stations, ch 264	SSB	QSX 2129.0 kHz
	EAC	Tarifa R, E		

1704.0	OXZ	Lyngby R, DNK		
1705.0 - 1800.0		Region 1 = MARITIME MOBILE + /FIXED/ + /LAND MOBILE/ <480A 483 484 488> Region 2 = AERONAUTICAL RADIONAVIGATION + FIXED + MOBILE + RADIOLOCATION Region 3 = FIXED + MOBILE + RADIOLOCATION + RADIONAVIGATION <482>		
1707.0	Region 1	coast stations, ch 265	SSB	QSX 2132.0 kHz
	FFD	Saint Denis R, REU		
		Machichaco R, E		
1710.0	Region 1	coast stations, ch 266	SSB	QSX 2135.0 kHz
	LGP	Bodoe R, NOR		
	SDJ	Stockholm R, S		
	V5L 21	Lüderitz R, NMB		
1713.0	Region 1	coast stations, ch 267	SSB	QSX 2138.0 kHz
	LGV	Vardoe R, NOR		
	PCG	Scheveningen R, NLD		
	TFV	Vestmannaeyjar R, ISL		
1716.0	Region 1	coast stations, ch 268	SSB	QSX 2060.0 kHz
	IDC	Cagliari R, I		
	PCG	Scheveningen R, NLD		
1719.0	Region 1	coast stations, ch 269	SSB	QSX 2063.0 kHz
	LGL	Floroe R, NOR		
	OHG	Helsinki R, FIN		
1722.0	Region 1	coast stations, ch 270	SSB	QSX 2066.0 kHz
	FFO	Saint Nazaire R, F		
1725.0	Region 1	coast stations, ch 271	SSB	QSX 2069.0 kHz
	CUG	Ponta Delgada R, AZR		
	LGQ	Rogaland R, NOR		
	OSU	Oostende R, BEL		
	SVH	Iraklion R, GRC		
		Horta R, Faial, AZR		
1726.0	HZH	Jeddah R, ARS	SSB	QSX 1965.6 kHz
1728.0	Region 1	coast stations, ch 272	SSB	QSX 2072.0 kHz
	LGN	Bergen R, NOR		
	OSU	Oostende R, BEL		
	SUK	Quseir R, EGY		
1731.0	Region 1	coast stations, ch 273	SSB	QSX 2075.0 kHz
	GCC	Cullercoats R, G		
	LGS	Svalbard R, Spitsbgn., NOR		
1734.0	Region 1	coast stations, ch 274	SSB	QSX 2078.0 kHz
	OXZ	Lyngby R, DNK		
1735.0	7TO	Oran R, ALG	SSB	
1737.0	Region 1	coast stations, ch 275	SSB	QSX 2081.0 kHz
	LFO	Oerlandet R, NOR		
	LGV	Vardoe R, NOR		
	SUH	Alexandria R, EGY		
1740.0	Region 1	coast stations, ch 276	SSB	QSX 2084.0 kHz
	SVH	Iraklion R, GRC		
	3VL	Kelibia R, TUN		
1743.0	Region 1	coast stations, ch 277	SSB	QSX 2087.0 kHz
	CND 3	Safi R, MRC		
	LGP	Bodoe R, NOR		
	LMJ	Jan Mayen R, NOR		
1746.0	Region 1	coast stations, ch 278	SSB	QSX 2090.0 kHz
	EJK	Valentia R, IRL		
1749.0	Region 1	coast stations, ch 279	SSB	QSX 2093.0 kHz

1750.5	STP	Port Sudan R, SDN	SSB	
1752.0	Region 1	coast stations, ch 280	SSB	QSX 2096.0 kHz
	EJK	Valentia R, IRL		
	SUH	Alexandria R, EGY		
1755.0	Region 1	coast stations, ch 281	SSB	QSX 2099.0 kHz
	EAO	Palma R, E		
	FJA	Papeete R, Tahiti, OCE		
	TFX	Siglufjoerdur R, ISL		
1758.0	Region 1	coast stations, ch 282	SSB	QSX 2102.0 kHz
	OXJ	Torshavn R, Faroe Is., DNK		
	UAW	Makhachkala R, RUS		
1760.0	TAF	Samsun R, TUR	SSB	
1761.0	Region 1	coast stations, ch 283	SSB	QSX 2105.0 kHz
	IPL	Livorno R, I		
	TFM	Neskaupstadur R, ISL		
1764.0	Region 1	coast stations, ch 284	SSB	QSX 2108.0 kHz
	EAF	Finisterre R, E		
	IPC	Crotone R, I		
	V5L 23	Lüderitz R, NMB		
	V5W 4	Walvis Bay R, NMB		
	ZSA	Cape Agulhas R, AFS		
	ZSC 30	Cape Town R, AFS		
	ZSD 32	Durban R, AFS		
	ZSE	East London R, AFS		
	ZSM	Cape Columbine R, AFS		
	ZSQ	Port Elizabeth R, AFS		
1767.0	Region 1	coast stations, ch 285	SSB	QSX 2111.0 kHz
	OXZ	Lyngby R, DNK		
	SVN	Athens R, GRC		
	3VT	Tunis R, TUN		
		Cabo de Gata R, E		
1770.0	Region 1	coast stations, ch 286	SSB	QSX 2114.0 kHz
	FFB	Boulogne-sur-Mer R, F		
	LGP	Bodoe R, NOR		
	TFA	Reykjavik R, ISL		
1771.0	3VM	Mahdia R, TUN	SSB	
1773.0	Region 1	coast stations, ch 287	SSB	QSX 2117.0 kHz
	IPD	Civitavecchia R, I		
1776.0	Region 1	coast stations, ch 288	SSB	QSX 2120.0 kHz
	IQA	Augusta R, I		
1779.0	Region 1	coast stations, ch 289	SSB	QSX 2123.0 kHz
	SDJ	Stockholm R, S		
	3VK	Tabarka R, TUN		
1780.0	HZG	Dammam R, ARS	SSB	QSX 1956.6 kHz
1782.0	Region 1	coast stations, ch 290	SSB	QSX 2126.0 kHz
	IQQ	Mazara del Vallo R, I		
	LFO	Oerlandet R, NOR		
1785.0	Region 1	coast stations, ch 291	SSB	QSX 2129.0 kHz
	IQH	Napoli R, I		
	LGZ	Farsund R, NOR		
1788.0	Region 1	coast stations, ch 292	SSB	QSX 2132.0 kHz
1791.0	Region 1	coast stations, ch 293	SSB	QSX 2135.0 kHz
1792.0	7TA	El Djaza'ir R, ALG	SSB	
1794.0	Region 1	coast stations, ch 294	SSB	QSX 2138.0 kHz
	LZW 14	Varna R, BUL		
	SPO	Szczecin R, POL		
1797.0	Region 1	coast stations, ch 295	SSB	QSX 2060.0 kHz
	SDJ	Stockholm R, S		

1800.0 - 1810.0 Region 1 = RADIOLOCATION <485 486 487>
Region 2 = AMATEUR
Region 3 = AMATEUR + FIXED + MOBILE except aeronautical mobile + RADIONAVIGATION + Radiolocation
<489>

1803.0	LGP	Bodoe R, NOR	SSB	QSX 2406.0 kHz
1806.0	IZN	Porto Torres R, I	SSB	

1810.0 - 1850.0 Region 1 = AMATEUR <490 491 492 493>
Region 2 = AMATEUR
Region 3 = AMATEUR + FIXED + MOBILE except aeronautical mobile + RADIONAVIGATION + Radiolocation
<489>

1813.0	J2A	Jibuti R, DJI	SSB	
	TYA	Cotonou R, BEN	SSB	
	3XC 4	Conakry R, GUI	SSB	
	6VA	Dakar R, SEN	SSB	
1817.0	OSU	Oostende R, BEL	SSB	
1820.0	FFC	Arcachon R, F	SSB	
	OSU	Oostende R, BEL	SSB	
1824.0	SVR	Rhodes R, GRC	SSB	
1825.0	HZG	Dammam R, ARS	SSB	QSX 2002.0 kHz
1834.0	TKM	Grasse R, F	SSB	
1849.0	A7D	Doha R, QAT	SSB	
	SUK	Quseir R, EGY	SSB	

1850.0 - 2000.0 Region 1 = FIXED + MOBILE except aeronautical mobile
<484 488 495>
Region 2 = AMATEUR + FIXED + MOBILE except aeronautical mobile + RADIONAVIGATION + RADIOLOCATION
<494>
Region 3 = AMATEUR + FIXED + MOBILE except aeronautical mobile + RADIONAVIGATION + Radiolocation
<489>

1850.0	TAN	Izmir R, TUR	SSB	
	TAT	Canakkale R, TUR	SSB	
1852.0	IPP	Palermo R, I	SSB	
1855.0	IQP	San Benedetto del Tr. R, I	SSB	QSX 2023.0 kHz
	YLQ	Riga R, LVA	SSB	
1856.0	HZH	Jeddah R, ARS	SSB	QSX 2037.0 kHz
1862.0	FFC	Arcachon R, F	SSB	
	TFT	Hornafjoerdur R, ISL	SSB	QSX 2023.0 kHz
	TFZ	Isafjoerdur R, ISL	SSB	QSX 2023.0 kHz
		Hailuoto R, FIN	SSB	QSX 2002.0 kHz
1869.0	GKZ	Humber R, G	SSB	
1876.0	FFU	Brest - Le Conquet R, F	SSB	
	IQN	Lampedusa R, I	SSB	QSX 2023.0 kHz
	TFA	Reykjavik R, ISL	SSB	QSX 2506.0 kHz
1881.0	5TA	Nouadhibou R, MTN	SSB	
1883.0	TFX	Siglufjoerdur R, ISL	SSB	QSX 2484.0 kHz
1888.0	IPD	Civitavecchia R, I	SSB	QSX 2023.0 kHz
1890.0	PCG	Scheveningen R, NLD	SSB	
	TFA	Reykjavik R, ISL	SSB	
1901.0	OSU	Oostende R, BEL	SSB	
1904.0	OSU	Oostende R, BEL	SSB	

1905.0	OSU	Oostende R, BEL	SSB	
	SAB	Goeteborg R, S	SITOR-A: 24 h tts; QSX 2222.0 kHz	
1906.0	FFM	Marseille R, F	SSB	
1908.0	OSU	Oostende R, BEL	SSB	
1911.0	CND	Agadir R, MRC	SSB	
	CNW	Tanger R, MRC	SSB	
	7TB	Annaba R, ALG	SSB	
1925.0	GKZ	Humber R, G	SSB	QSX 2105.0 kHz
	IPL	Livorno R, I	SSB	
1944.5		UNID teleprinter	MFSK	
1971.5		ship stations	QSX 2815.5 kHz (OST)	
1980.0	9WW 21	Miri R, Sarawak, MLA	SSB	
1997.5	CBP	Puerto Montt R, CHL	SSB	
	CBV	Valparaiso R, CHL	SSB	

2000.0 - 2025.0 **Region 1 = FIXED + MOBILE except aeronautical mobile (R)**
<484 495>
Regions 2 + 3 = FIXED + MOBILE

2003.5	VWB	Mumbai R, IND	SSB
	VWC	Calcutta R, IND	SSB
	VWT	Tuticorin R, IND	SSB
2009.0	HLU	Taeha-dong R, U.d.I., KOR	SSB
2012.0	ZKJ	Penrhyn R, CKH	SSB
	ZKO	Aitutaki R, CKH	SSB
	ZMH 28	Wellington Harbour R, NZL	SSB
	ZMH 74	Gisborne Harbour R, NZL	SSB
	ZMH 211	Wanganui Harbour R, NZL	SSB
		Auckland Harbour R, NZL	SSB
		Manukau Harbour R, NZL	SSB
		Onehunga Harbour R, NZL	SSB
2020.0	VJC	RFDS Bkn. Hill, NSW, AUS	SSB
	VJD	RFDS Alice Spr., NT, AUS	SSB
	VJI	RFDS Mt. Isa, QLD, AUS	SSB
	VJJ	RFDS Charlevl., QLD, AUS	SSB
	VJN	RFDS Cairns, QLD, AUS	SSB
	VNZ	RFDS Pt. Augusta, SA, AUS	SSB

2025.0 - 2045.0 **Region 1 = FIXED + MOBILE except aeronautical mobile (R) +**
Meteorological Aids <484 495 496>
Regions 2 + 3 = FIXED + MOBILE

2032.0	VZX	Penta R, Gosf., NSW, AUS	SSB
2037.5	KFS	San Francisco R, CA, USA	CW
	VWK	Kandla R, IND	SSB
	VWL	Mangalore R, IND	SSB
	VWP	Port Blair R, IND	SSB
2038.0	TXU	Saint-Pierre R, SPM	SSB
2040.0	IPL	Livorno R, I	SSB
2042.5	VWM	Madras R, IND	SSB
2044.0	HLY	Yosu R, KOR	SSB

2045.0 - 2065.0 **Region 1 = MARITIME MOBILE + /FIXED/ + /LAND MOBILE/**
<483 484>
Regions 2 + 3 = FIXED + MOBILE

2045.0	Region 1	SHIP-TO-SHORE WORKING FREQ.	SSB	
	KPH	San Francisco R, CA, USA	CW	
	ZMH 25	Napier R, NZL	SSB	
	ZMH 28	Wellington Harbour R, NZL	SSB	
	ZMH 29	Houhora R, NZL	SSB	
	ZMH 33	Motueka R, NZL	SSB	
	ZMH 35	NZCG Tauranga, NZL	SSB	
	ZMH 39	Whangaroa R, NZL	SSB	
	ZMH 48	NZCG Whitianga, NZL	SSB	
	ZMH 49	NZCG Taranaki, NZL	SSB	
	ZMH 50	Timaru F R, NZL	SSB	
	ZMH 54	Whangamata R, NZL	SSB	
	ZMH 57	Nelson R, NZL	SSB	
	ZMH 62	Westport R, NZL	SSB	
	ZMH 74	Gisborne Harbour R, NZL	SSB	
	ZMH 83	NZCG Whakatane, NZL	SSB	
	ZMH 203	Preservation Inlet R, NZL	SSB	
	ZMH 211	Wanganui Harbour R, NZL	SSB	
	ZMH 222	Great Barrier Island R, NZL	SSB	
		Bluff F R, NZL	SSB	
		Castlepoint R, NZL	SSB	
		Halfm. Bay F R, St. I., NZL	SSB	
		Kawhia R, NZL	SSB	
		Little Barrier Island R, NZL	SSB	
		Marlborough R, NZL	SSB	
		N. Plymouth Harb. R, NZL	SSB	
		Onerahi Sports R, NZL	SSB	
		Pitt I. R, Chatham Is., NZL	SSB	
		Port Chalmers R, NZL	SSB	
		Riverton F R, NZL	SSB	
		Tauranga Port R, NZL	SSB	
		Waikawa F R, NZL	SSB	
2046.0	HKB	Barranquilla R, CLM	SSB	
2047.5	VWG	Goa R, IND	SSB	
2048.0	Region 1	INTERSHIP WORKING FREQ.	SSB	
	WNU	Slidell R, LA, USA	SSB	
2049.0	HKC	Buenaventura R, CLM	SSB	
2050.0	HLC	Inchon R, KOR	CW	
	HLK	Gangreung R, KOR	CW	
	HLP	Pusan R, KOR	CW	
2051.0	Region 1	ADD. SHIP-TO-SHORE WKG. F.	SSB	
2053.0	HKB	Barranquilla R, CLM	SSB	
2054.0	Region 1	ADD. SHIP-TO-SHORE WKG. F.	SSB	
	VAC	CCG Courtenay, BC, CAN	SSB	
	VAE	CCG Tofino, BC, CAN	SSB	
	VAI	CCG Vancouver, BC, CAN	SSB	
	VAJ	CCG Pr. Rupert, BC, CAN	SSB	
2055.0	XSX	Chi-lung R, TAI	SSB	
2055.5	WLO	Mobile R, AL, USA	CW	
2056.0	VIB	Brisbane R, QLD, AUS	SSB	QSX 2760.0 kHz
	VID	Darwin R, NT, AUS	SSB	QSX 2760.0 kHz
	VIM	Melbourne R, VIC, AUS	SSB	QSX 2760.0 kHz
	VIP	Perth R, WA, AUS	SSB	QSX 2760.0 kHz
	VIS	Sydney R, NSW, AUS	SSB	QSX 2760.0 kHz
	VIT	Townsville R, QLD, AUS	SSB	QSX 2760.0 kHz
2057.0	Region 1	ADD. SHIP-TO-SHORE WKG. F.	SSB	
2060.0	Region 1	ship stations, ch 241/268/295	SSB	QSX 1635.0 / 1716.0 / 1797.0 kHz
	VRX	Victoria Harbour R, HKG	SSB	QSX 2547.0 kHz
2061.5	KFS	San Francisco R, CA, USA	CW	

2063.0	Region 1	ship stations, ch 242 / 269	SSB	QSX 1638.0 / 1719.0 kHz
	KLB	Seattle R, WA, USA	CW	

2065.0 - 2107.0 **Region 1 = MARITIME MOBILE + /FIXED/ + /LAND MOBILE/** <483 484>
Regions 2 + 3 = MARITIME MOBILE <497 498>

2065.0	L2F	ACG Buenos Aires, ARG	SSB	
	L2T	ACG Mar del Plata, ARG	SSB	
	L3A	ACG Com. Rivadavia, ARG	SSB	
	L3O	ACG Ushuaia, ARG	SSB	
	L3V	ACG Rio de la Plata, ARG	SSB	
	L4F	ACG Rio Grande, ARG	SSB	
	L4M	ACG San Julian, ARG	SSB	
	L4N	ACG Puerto Deseado, ARG	SSB	
	L5B	ACG Quequen, ARG	SSB	
2066.0	Region 1	ship stations, ch 243 / 270	SSB	QSX 1641.0 / 1722.0 kHz
2068.0		Halfm. Bay F R, St. I., NZL	SSB	
2069.0	Region 1	ship stations, ch 244 / 271	SSB	QSX 1644.0 / 1725.0 kHz
2072.0	Region 1	ship stations, ch 245 / 272	SSB	QSX 1647.0 / 1728.0 kHz
	VTG 3	IN Mumbai, IND	CW	
2073.0	XVU	Can Tho R, VTN	SSB	
2075.0	Region 1	ship stations, ch 246 / 273	SSB	QSX 1650.0 / 1731.0 kHz
2078.0	Region 1	ship stations, ch 247 / 274	SSB	QSX 1653.0 / 1734.0 kHz
2079.0	LPW	Bahia Blanca R, ARG	SSB	
2080.0	A3A	Nuku'alofa R, TON	SSB	
2081.0	Region 1	ship stations, ch 248 / 275	SSB	QSX 1656.0 / 1737.0 kHz
2082.5	LPX	Com. Rivadavia R, ARG	SSB	
2084.0	Region 1	ship stations, ch 249 / 276	SSB	QSX 1659.0 / 1740.0 kHz
2085.0	VWN	Cochin R, IND	SSB	
2086.0	LPL	General Pacheco R, ARG	SSB	
	PPC	Itajai R, B	SSB	
	PPJ	Juncao R, B	SSB	
	PPL	Belem R, B	SSB	
	PPO	Olinda R, B	SSB	
	PPR	Rio de Janeiro R, B	SSB	
	WCM	Withamsville R, OH, USA	SSB	
	XSW	Kao-hsiung R, TAI	SSB	
2087.0	Region 1	ship stations, ch 250 / 277	SSB	QSX 1662.0 / 1743.0 kHz
2089.0	ZMH 28	Wellington Harbour R, NZL	SSB	
	ZMH 39	Whangaroa R, NZL	SSB	
	ZMH 44	Tutukaka R, NZL	SSB	
		N. Plymouth Harb. R, NZL	SSB	
		Onerahi Sports R, NZL	SSB	
		Russell R, NZL	SSB	
2089.5	LPZ	Trelew R, ARG	SSB	
	PPL	Belem R, B	SSB	
	PPO	Olinda R, B	SSB	
	PPR	Rio de Janeiro R, B	SSB	
2090.0	Region 1	ship stations, ch 251 / 278	SSB	QSX 1665.0 / 1746.0 kHz
2091.0	HLC	Inchon R, KOR	CW	
	HLK	Gangreung R, KOR	CW	
	HLM	Mokp'o R, KOR	CW	
	HLN	Kunsan R, KOR	CW	
	HLP	Pusan R, KOR	CW	
	HLU	Taeha-dong R, U.d.I., KOR	CW	
	HLY	Yosu R, KOR	CW	
		Cheju R, KOR	CW	

2093.0	Region 1	ship stations, ch 252 / 279	SSB	QSX 1668.0 / 1749.0 kHz
	LPM	Mar del Plata R, ARG	SSB	
2096.0	Region 1	ship stations, ch 253 / 280	SSB	QSX 1671.0 / 1752.0 kHz
2096.5	PPC	Itajai R, B	SSB	
	PPF	Fortaleza R, B	SSB	
	PPJ	Juncao R, B	SSB	
2097.0	VWV	Vishakhapatnam R, IND	SSB	
	VWY	Paradwip R, IND	SSB	
2098.8	UBJ	Baku R, AZE	SSB	QSX 2464.0 kHz
2099.0	Region 1	ship stations, ch 254 / 281	SSB	QSX 1674.0 / 1755.0 kHz
2100.0	LPL	General Pacheco R, ARG	SSB	
		ship stations	**QSX 3210.0 kHz (LYK)**	
2102.0	Region 1	ship stations, ch 255 / 282	SSB	QSX 1677.0 / 1758.0 kHz
2103.5	LPG	Rio Gallegos R, ARG	SSB	
2104.0		Kaingaroa F R, Ch. Is., NZL	SSB	
		Waitangi F R, Ch. Is., NZL	SSB	
2105.0	Region 1	ship stations, ch 256 / 283	SSB	QSX 1680.0 / 1761.0 kHz

2107.0 - 2160.0 **Region 1 = MARITIME MOBILE + /FIXED/ + /LAND MOBILE/**
<483 484>
Regions 2 + 3 = FIXED + MOBILE

2108.0	Region 1	ship stations, ch 257 / 284	SSB	QSX 1683.0 / 1764.0 kHz
2111.0	Region 1	ship stations, ch 258 / 285	SSB	QSX 1686.0 / 1767.0 kHz
	3DP	Suva R, FJI	SSB	QSX 2162.0 kHz
2113.3		**ship stations**	**QSX 2608.3 kHz (HZH)**	
2114.0	Region 1	ship stations, ch 259 / 286	SSB	QSX 1689.0 / 1770.0 kHz
2115.0	TXU	Saint-Pierre R, SPM	SSB	
2116.0	OXI	Nuuk R, GRL	SSB	QSX 1933.0 kHz
2117.0	Region 1	ship stations, ch 260 / 287	SSB	QSX 1692.0 / 1773.0 kHz
	T3C	Takaronga R, T. Atl., KIR	SSB	QSX 2210.0 kHz
2120.0	Region 1	ship stations, ch 261 / 288	SSB	QSX 1695.0 / 1776.0 kHz
	YVG	La Guaira R, VEN	SSB	
2123.0	Region 1	ship stations, ch 262 / 289	SSB	QSX 1698.0 / 1779.0 kHz
2126.0	Region 1	ship stations, ch 263 / 290	SSB	QSX 1701.0 / 1782.0 kHz
2129.0	Region 1	ship stations, ch 264 / 291	SSB	QSX 1704.0 / 1785.0 kHz
	OXF	Qaqortoq R, GRL	SSB	QSX 2630.0 kHz
	ZMH 28	Wellington Harbour R, NZL	SSB	
	ZMH 84	NZCG Wellington, NZL	SSB	
		Auckland Harbour R, NZL	SSB	
		Lyttelton R, NZL	SSB	
		NZCG Auckland, NZL	SSB	
		NZCG Manukau, NZL	SSB	
		Onerahi Sports R, NZL	SSB	
2130.0	9WW 20	Kuching R, Sarawak, MLA	SSB	
2132.0	Region 1	ship stations, ch 265 / 292	SSB	QSX 1707.0 / 1788.0 kHz
2135.0	Region 1	ship stations, ch 266 / 293	SSB	QSX 1710.0 / 1791.0 kHz
2138.0	Region 1	ship stations, ch 267 / 294	SSB	QSX 1713.0 / 1794.0 kHz
2140.0	S3D	Chittagong R, BGD	SSB	
	S3E	Khulna R, BGD	SSB	
2142.0	**Region 1**	**ship stations, channel 201**	**QSX 1607.0 kHz**	
2142.5	**Region 1**	**ship stations, channel 202**	**QSX 1607.5 kHz**	
2143.0	**Region 1**	**ship stations, channel 203**	**QSX 1608.0 kHz**	
2143.5	**Region 1**	**ship stations, channel 204**	**QSX 1608.5 kHz**	
2144.0	**Region 1**	**ship stations, channel 205**	**QSX 1609.0 kHz**	
2144.5	**Region 1**	**ship stations, channel 206**	**QSX 1609.5 kHz**	
2145.0	**Region 1**	**ship stations, channel 207**	**QSX 1610.0 kHz**	
2145.5	**Region 1**	**ship stations, channel 208**	**QSX 1610.5 kHz**	
2146.0	**Region 1**	**ship stations, channel 209**	**QSX 1611.0 kHz**	

2146.5	Region 1	ship stations, channel 210	QSX 1611.5 kHz
2147.0	Region 1	ship stations, channel 211	QSX 1612.0 kHz
2147.5	Region 1	ship stations, channel 212	QSX 1612.5 kHz
2148.0	Region 1	ship stations, channel 213	QSX 1613.0 kHz
2148.5	Region 1	ship stations, channel 214	QSX 1613.5 kHz
2149.0	Region 1	ship stations, channel 215	QSX 1614.0 kHz
2149.5	Region 1	ship stations, channel 216	QSX 1614.5 kHz
2150.0	Region 1	ship stations, channel 217	QSX 1615.0 kHz
2150.5	Region 1	ship stations, channel 218	QSX 1615.5 kHz
2151.0	Region 1	ship stations, channel 219	QSX 1616.0 kHz
2151.5	Region 1	ship stations, channel 220	QSX 1616.5 kHz
2152.0	Region 1	ship stations, channel 221	QSX 1617.0 kHz
2152.5	Region 1	ship stations, channel 222	QSX 1617.5 kHz
2153.0	Region 1	ship stations, channel 223	QSX 1618.0 kHz
2153.5	Region 1	ship stations, channel 224	QSX 1618.5 kHz
2154.0	Region 1	ship stations, channel 225	QSX 1619.0 kHz
		ship stations	QSX 2727.0 kHz (JYO)
2154.5	Region 1	ship stations, channel 226	QSX 1619.5 kHz
2155.0	Region 1	ship stations, channel 227	QSX 1620.0 kHz
2155.5	Region 1	ship stations, channel 228	QSX 1620.5 kHz
2156.0	Region 1	ship stations, channel 229	QSX 1621.0 kHz
2156.5	Region 1	ship stations, channel 230	QSX 1621.5 kHz
2157.0	Region 1	ship stations, channel 231	QSX 1622.0 kHz
2157.5	Region 1	ship stations, channel 232	QSX 1622.5 kHz
2158.0	Region 1	ship stations, channel 233	QSX 1623.0 kHz
2158.5	Region 1	ship stations, channel 234	QSX 1623.5 kHz
2159.0	Region 1	ship stations, channel 235	QSX 1624.0 kHz
2159.5	Region 1	ship stations, channel 236	QSX 1624.5 kHz

2160.0 - 2170.0 **Region 1 = RADIOLOCATION** <485 486 487 499>
Regions 2 + 3 = FIXED + MOBILE

2161.0	VCT	Tors Cove R, NFLD, CAN	SSB	QSX 2445.0 kHz
2162.0	ZBP	Adamstown R, PTC	SSB	
	ZMH 74	Gisborne Harbour R, NZL	SSB	
	ZMH 211	Wanganui Harbour R, NZL	SSB	
		Auckland Harbour R, NZL	SSB	
		N. Plymouth Harb. R, NZL	SSB	
		Tauranga Port R, NZL	SSB	
2167.0	H4H	Honiara R, SLM	SSB	
2168.0	YJM	Port-Vila R, VUT	SSB	

2170.0 - 2173.5 **MARITIME MOBILE**

2170.5	REGION 1	COAST STATIONS CALLING FREQ.	SSB

2173.5 - 2190.5 **MOBILE (distress and calling)** <500 500A 500B 501>

2174.5	WORLDWIDE	NBDPT DISTRESS AND SAFETY F.	
2177.0	WORLDWIDE	COAST STATIONS AND INTERSHIP DSC CALLING FREQUENCY	
2182.0	WORLDWIDE	CALLING/DISTRESS/SAFETY F.	SSB
2187.5	WORLDWIDE	DSC DISTRESS AND SAFETY F.	
2189.5	WORLDWIDE	SHIP STATIONS DSC CALLING F.	

2190.5 - 2194.0 MARITIME MOBILE

2191.0	REGION 1	SHIP STATIONS CALLING FREQ.	SSB	
	V5L 22	Lüderitz R, NMB	SSB	
	V5W 6	Walvis Bay R, NMB	SSB	
	XSW	Kao-hsiung R, TAI	SSB	
	XSX	Chi-lung R, TAI	SSB	
	ZSA	Cape Agulhas R, AFS	SSB	QSX 2045.0 kHz
	ZSM	Cape Columbine R, AFS	SSB	QSX 2045.0 kHz
	ZSQ 27	Port Elizabeth R, AFS	SSB	
2192.0	9PA	Banana R, ZAI	SSB	

2194.0 - 2300.0 Region 1 = FIXED + MOBILE except aeronautical mobile (R)

<484 495 505>

Regions 2 + 3 = FIXED + MOBILE <502>

2222.0		ship stations	QSX 1905.0 kHz (SAB)	
2225.0	OXI	Nuuk R, GRL	SSB	QSX 1638.0 kHz
	OXM	Ittoqqorttoormiit R, GRL	SSB	QSX 1665.0 kHz
2234.5	DER	MOI Bonn, D	VFT: ARQ-E 72 Bd: 0648+1704-2326 tfc or msg to Hamburg [GNVHF]	
2235.0	OYR	Aasiat R, GRL	SSB	QSX 1665.0 kHz
2235.5	DER	MOI Bonn, D	VFT: ARQ-E 96 Bd: 1645-0657 tfc or msgs to Hamburg [HHVHF]	
2250.0	OZL	Ammassalik R, GRL	SSB	QSX 2090.0 kHz
2253.0	OSU	Oostende R, BEL	SSB	
2256.0	OSU	Oostende R, BEL	SSB	
2260.0	VJN	RFDS Cairns, QLD, AUS	SSB	
2264.0	UGN	Nikolay.-na-A. R, FE, RUS	SSB	
	UQC	Korsakov R, FE, RUS	SSB	
2265.0	OXF	Qaqortoq R, GRL	SSB	QSX 1665.0 kHz
2266.0	V5L 23	Lüderitz R, NMB	SSB	
	V5W 26	Walvis Bay R, NMB	SSB	
2270.0	XFB	Ciudad del Carmen R, MEX	SSB	
	XFC	Cozumel R, MEX	SSB	
	XFF	Coatzacoalcos R, MEX	SSB	
	XFP	Chetumal R, MEX	SSB	
	XFS	Tampico R, MEX	SSB	
	XFU	Veracruz R, MEX	SSB	
2280.0	VJK	RFDS Meekath., WA, AUS	SSB	
	VJT	RFDS Carnarvon, WA, AUS	SSB	
	VKL	RFDS Port Hedl., WA, AUS	SSB	
2282.0	ZAC	Shengjin R, ALB	SSB	
	ZAD	Durres R, ALB	SSB	
	ZAS	Sarande R, ALB	SSB	
	ZAV	Vlore R, ALB	SSB	
2284.0	HLC	Inchon R, KOR	SSB	
2291.0	IDQ	IN Rome, I	CW	
2293.9	DER	MOI Bonn, D	VFT: ARQ-E 96 Bd: 1559-0300 tfc or msg to Berlin [BRVHF]	
2295.0	VTP 3	IN Vishakhapatnam, IND	CW	
2295.9		Berlin, D	VFT: ARQ-E 96 Bd: 1644-0543 tfc or msg to DER Bonn [HFVBR]	
2299.0		Cheju R, KOR	CW	

2300.0 - 2495.0 Region 1 = BROADCASTING + FIXED + MOBILE except aeronautical mobile (R) <495 503>
Regions 2 + 3 = BROADCASTING + FIXED + MOBILE <503>

2304.0	OYR	Aasiat R, GRL	SSB	QSX 1995.0 kHz
2310.0	UFA	Batumi R, GEO	SSB	
2320.0	TYA	Cotonou R, BEN	SSB	
	XFN	Progreso R, MEX	SSB	
	XFP	Chetumal R, MEX	SSB	
	XFS	Tampico R, MEX	SSB	
	XFU	Veracruz R, MEX	SSB	
	5AT	Tripoli R, LBY	SSB	
2341.0	D4D	Praia R, Santiago, CPV	SSB	
2342.5	*DHJ 51*	*Grengel Meteo, D*	*FAX // 2017.5 kHz $*	
2350.5	ICA	IN Ancona, I	SSB	
2352.5	ASK	Karachi R, PAK	SSB	
2356.0	V5L 25	Lüderitz R, NMB	SSB	
	V5W	Walvis Bay R, NMB	SSB	
	ZSA	Cape Agulhas R, AFS	SSB	QSX 2023.0 kHz
	ZSE	East London R, AFS	SSB	
	ZSM	Cape Columbine R, AFS	SSB	QSX 2023.0 kHz
2357.0	HLM	Mokp'o R, KOR	SSB	QSX 2312.0 kHz
2357.5	OUA 32	DM Stevns, DNK	CW	
2360.0	VJY	RFDS Darwin, NT, AUS	SSB	
2373.0	OSU	Oostende R, BEL	SSB	
2376.0	OSU	Oostende R, BEL	SSB	
2385.0	HLC	Inchon R, KOR	SSB	
2386.0	DER	MOI Bonn, D	VFT: ARQ-E 72 Bd: 1558-0700 tfc or msgs to München [GSVHF]	
2387.7	DER	MOI Bonn, D	VFT: ARQ-E 96 Bd: 1431-0740 tfc or msgs to Stuttgart [BWVHF]	
2398.0		UNID teleprinter	150	
2400.0	OXI	Nuuk R, GRL	SSB	QSX 1895.0 kHz
	ZAC	Shengjin R, ALB	SSB	QSX 2525.0 kHz
	ZAD	Durres R, ALB	SSB	QSX 2525.0 kHz
	ZAS	Sarande R, ALB	SSB	QSX 2525.0 kHz
	ZAV	Vlore R, ALB	SSB	QSX 2525.0 kHz
2410.0	TXU	Saint-Pierre R, SPM	SSB	
2416.0		Abidjan F R, CTI	SSB	
2418.0	5AT	Tripoli R, LBY	SSB	
2419.0	CLM	Santiago de Cuba R, CUB	SSB	QSX 2830.0 kHz
2423.5	SAB	Goeteborg R, S	SITOR-A: 24 h tts; QSX 3267.5 kHz SITOR-B: 1700 Swedish nx	
2429.0	MKL	RAF Edinburgh, G	CW	
2431.0	XFA	Acapulco R, MEX	SSB	
	XFK	La Paz R, MEX	SSB	
	XFM	Manzanillo R, MEX	SSB	
	XFQ	Salina Cruz R, MEX	SSB	
	XFY	Guaymas R, MEX	SSB	
2433.0	HLC	Inchon R, KOR	SSB	
	HLK	Gangreung R, KOR	SSB	
	HLM	Mokp'o R, KOR	SSB	
	HLN	Kunsan R, KOR	SSB	
	HLP	Pusan R, KOR	SSB	
	HLU	Taeha-dong R, U.d.I., KOR	SSB	
	HLY	Yosu R, KOR	SSB	
		Cheju R, KOR	SSB	
2439.0	D4A	Mindelo R, S. Vicente, CPV	SSB	
	D4D	Praia R, Santiago, CPV	SSB	

2442.0	DER	MOI Bonn, I	VFT: ARQ-E 96 Bd: 1430-2124 tfc or msg to Berlin [GOVHF]
	WOM	Miami R, FL, USA	SSB
2442.7	DER	MOI Bonn, D	VFT: ARQ-E 72 Bd: 1642-0539 tfc or encrypted msg after "ZZZZ" to Berlin [GOVHF]
2444.0	ZMH 25	Napier R, NZL	SSB
	ZMH 28	Wellington Harbour R, NZL	SSB
	ZMH 33	Motueka R, NZL	SSB
	ZMH 49	NZCG Taranaki, NZL	SSB
	ZMH 203	Preservation Inlet R, NZL	SSB
	ZMH 222	Great Barrier Island R, NZL	SSB
		Fiordland F R, NZL	SSB
		Kawhia R, NZL	SSB
		Leigh R, NZL	SSB
2450.0	KMI	Dixon R, CA, USA	SSB
2456.0		UNID teleprinter	100
2457.5	AQP 2	PN Karachi, PAK	CW
2458.0	IPL	Livorno R, I	SSB
	VAE	CCG Tofino, BC, CAN	SSB QSX 2340.0 kHz
2460.0	HLP	Pusan R, KOR	SSB
	YLQ	Riga R, LVA	SITOR-A: 1443-0749 R tts wtsca SITOR-B: 1415 tfc list, 1542+ 1951+2037+2109 R tts wtsca CW/SSB
2461.0		FF IFOR Zagreb, HRV	SSB
2461.5	'0A'	IAF Dublin, IRL	SITOR-A: 1853 msgs (sightings' position reports) + final tfc to '14', s. off; 2330 msgs
2464.0	UFF	Sukhumi R, GEO	SSB
	UWD	Yalta R, UKR	SSB
2465.0	XSZ	Dalian R, CHN	SSB
2470.0	XFA	Acapulco R, MEX	SSB
	XFE	Ensenada R, MEX	SSB
	XFL	Mazatlan R, MEX	SSB
	XFM	Manzanillo R, MEX	SSB
	XFY	Guaymas R, MEX	SSB
2474.0	PBC 32	DN Goeree Island, NLD	ITA2 75 Bd: 24 h channel status
2477.0		ship stations	QSX 2716.0 kHz (SAB)
2480.0	ZMH 25	Napier R, NZL	SSB
	ZMH 28	Wellington Harbour R, NZL	SSB
	ZMH 29	Houhora R, NZL	SSB
	ZMH 37	Mangonui R, NZL	SSB
	ZMH 39	Whangaroa R, NZL	SSB
	ZMH 49	NZCG Taranaki, NZL	SSB
		Fiordland F R, NZL	SSB
		Gisborne F R, NZL	SSB
		Kaingaroa F R, Ch. Is., NZL	SSB
		Onerahi Sports R, NZL	SSB
		Russell R, NZL	SSB
		Waitangi F R, Ch. Is., NZL	SSB
2481.0	OSU	Oostende R, BEL	SSB
2484.0	OSU	Oostende R, BEL	SSB
2487.0	VCT	Tors Cove R, NFLD, CAN	SSB
2490.0	WOM	Miami R, FL, USA	SSB

2495.0 - 2498.0 **Region 1 = BROADCASTING + FIXED + MOBILE except aeronautical mobile (R) <495 503>**
Regions 2 + 3 = STANDARD FREQUENCY AND TIME SIGNAL

2496.3		ship stations		QSX 3607.3 kHz (GKZ)

2498.0 - 2501.0 **STANDARD FREQUENCY AND TIME SIGNAL**

2500.0	BPM	Xi'an TS, CHN	CW
	HLA	Taejon TS, KOR	COMB
	RCH	Tashkent TS, UZB	CW
	VNG	Sydney TS, NSW, AUS	COMB
	WWV	Fort Collins TS, CO, USA	COMB
	WWVH	Kihei TS, Maui Island, HWA	COMB

2501.0 - 2502.0 **STANDARD FREQUENCY AND TIME SIGNAL + Space Research**

2502.0 - 2505.0 **Region 1 = FIXED + Mobile except aeronautical mobile (R) <484 495 504>**
Regions 2 + 3 = STANDARD FREQUENCY AND TIME SIGNAL

2505.0 - 2625.0 **Region 1 = FIXED + MOBILE except aeronautical mobile (R) <484 495 504>**
Regions 2 + 3 = FIXED + MOBILE

2506.0	FJY 4	Martin de Vivies R, AMS	SSB	QSX 2620.0 kHz
	KGN	Delcambre R, LA, USA	SSB	QSX 2458.0 kHz
	KMI	Dixon R, CA, USA	SSB	
	KTD 590	Cape Elizabeth R, ME, USA	SSB	
	WAH	Saint Thomas R, VIR	SSB	QSX 2009.0 kHz
2507.7	HPP 20	Panama R, PNR	SSB	
2508.0	HLN	Kunsan R, KOR	SSB	
2510.0	VCT	Tors Cove R, NFLD, CAN	SSB	
2513.0	5AB	Benghazi R, LBY	SSB	
2514.0	VCC	CCG Quebec, QUE, CAN	SSB	QSX 2118.0 kHz
	VCG	CCG R.-au-Ren., QUE, CAN	SSB	QSX 2118.0 kHz
	VCK	CCG Sept Iles, QUE, CAN	SSB	QSX 2118.0 kHz
	VCM	CCG St. Anth., NFLD, CAN	SSB	QSX 2118.0 kHz
	VCN	CCG Grindst. I., QUE, CAN	SSB	QSX 2118.0 kHz
	VCP	CCG St. Lawr., NFLD, CAN	SSB	QSX 2118.0 kHz
	VFF	CCG Iqaluit, NWT, CAN	SSB	QSX 2118.0 kHz
	VFN	CCG Montreal, QUE, CAN	SSB	QSX 2118.0 kHz
	VOJ	CCG Stephenv., NFLD, CAN	SSB	QSX 2118.0 kHz
	VOK	CCG Cartwgt., NFLD, CAN	SSB	QSX 2118.0 kHz
	VON	CCG St. John's, NFLD, CAN	SSB	QSX 2118.0 kHz
	WLC	Rogers City R, MI, USA	SSB	QSX 2118.0 kHz
	WOM	Miami R, FL, USA	SSB	QSX 2118.0 kHz
2517.0	OVG 2	DM Frederikshavn, DNK	CW	
2522.0	C6N 2	Nassau R, BAH	SSB	QSX 2126.0 kHz
2524.0	VH2 ...	many ACG stations, AUS	SSB	
	VZX	Penta R, Gosf., NSW, AUS	SSB	
2525.0	UEF	Nar'yan Mar R, RUS	SSB	
	UIB	Magadan R, FE, RUS	SSB	
	UWT	Taganrog R, UKR	SSB	

2529.5		ship stations	QSX 2829.5 kHz (SPB)
2530.0	KEJ	Hoolehua R, HWA	SSB QSX 2134.0 kHz
	VCA	CCG Charlottet., PEI, CAN	SSB QSX 2815.0 kHz
	VCO	CCG Sydney, NS, CAN	SSB QSX 2815.0 kHz
2538.0	VAU	CCG Yarmouth, NS, CAN	SSB
	VCP	CCG St. Lawr., NFLD, CAN	SSB
	VOJ	CCG Stephenv., NFLD, CAN	SSB
	VOK	CCG Cartwgt., NFLD, CAN	SSB
	VON	CCG St. John's, NFLD, CAN	SSB
		ship stations	QSX 2727.0 kHz (DAN)
2542.0	XFB	Ciudad del Carmen R, MEX	SSB
	XFC	Cozumel R, MEX	SSB
	XFF	Coatzacoalcos R, MEX	SSB
	XFN	Progreso R, MEX	SSB
2543.5		ship stations	QSX 2643.5 kHz (SPS)
2545.0	FFP	Fort de France R, MRT	SSB
	XSN	Ningbo R, CHN	SSB
2550.0	WLC	Rogers City R, MI, USA	SSB QSX 2158.0 kHz
2550.3		UNID station (896)	VFT: ARQ-E 96 Bd: 0542 tfc
2552.0	CLK 2	Santa Cruz del Sur R, CUB	SSB
2555.0	8RB	Demerara R, GUY	SSB
2558.0	C6N 2	Nassau R, BAH	SSB QSX 2198.0 kHz
	VFA	CCG Inuvik, NWT, CAN	SSB QSX 2142.0 kHz
	WNU	Slidell R, LA, USA	SSB QSX 2166.0 kHz
	8RB	Demerara R, GUY	SSB
2559.5		UNID teleprinter	100
2560.0	UCV	Okhotsk R, FE, RUS	CW
	XFE	Ensenada R, MEX	SSB
	XFK	La Paz R, MEX	SSB
	XFL	Mazatlan R, MEX	SSB
	XFQ	Salina Cruz R, MEX	SSB
2566.0	KFS	San Francisco R, CA, USA	SSB QSX 2009.0 kHz
	WLO	Mobile R, AL, USA	SSB QSX 2430.0 kHz
	WOM	Miami R, FL, USA	SSB
2569.0	CLF 2	Arroyos de Mantua R, CUB	SSB QSX 2830.0 kHz
2570.0	JYO	Aqaba R, JOR	SSB QSX 2051.0 / 2054.0 kHz
2572.0	WLO	Mobile R, AL, USA	SSB
2572.5		UNID teleprinter	75
2574.0		ship stations	QSX 3542.7 kHz (GKE)
2575.0	C9L 2	Maputo R, MOZ	SSB
2577.0		ship stations	QSX 2832.7 kHz (GNK)
2578.0	XSA 2	Nanjing R, CHN	SSB
	XSP	Shantou R, CHN	SSB
2579.0	IPB	Bari R, I	SSB QSX 2023.0 kHz
	5RO	Mahajanga R, MDG	SSB
	5RT	Toliara R, MDG	SSB
		Manakara Sud R, MDG	SSB
2580.0	UIW	Kaliningrad R, RUS	SSB
2582.0	CLT	Habana R, CUB	SSB QSX 2777.0 kHz
	CUL	Lisbon R, POR	SSB QSX 2051.0 kHz
	C6X 2	Marsh Harbour R, BAH	SSB QSX 2166.0 kHz
	TXU	Saint-Pierre R, SPM	SSB
	VAU	CCG Yarmouth, NS, CAN	SSB QSX 2206.0 kHz
	VBA	CCG Churchill, MAN, CAN	SSB QSX 2206.0 kHz
	VCA	CCG Charlottet., PEI, CAN	SSB QSX 2206.0 kHz
	VCC	CCG Quebec, QUE, CAN	SSB QSX 2206.0 kHz
	VCF	CCG Mont Joli, QUE, CAN	SSB QSX 2206.0 kHz
	VCG	CCG R.-au-Ren., QUE, CAN	SSB QSX 2206.0 kHz
	VCK	CCG Sept Iles, QUE, CAN	SSB QSX 2206.0 kHz
	VCM	CCG St. Anth., NFLD, CAN	SSB QSX 2206.0 kHz

2582.0	VCN	CCG Grindst. I., QUE, CAN	SSB	QSX 2206.0 kHz
	VCO	CCG Sydney, NS, CAN	SSB	QSX 2206.0 kHz
	VCP	CCG St. Lawr., NFLD, CAN	SSB	QSX 2206.0 kHz
	VFF	CCG Iqaluit, NWT, CAN	SSB	QSX 2206.0 kHz
	VFR	CCG Resolute, NWT, CAN	SSB	QSX 2206.0 kHz
	VOJ	CCG Stephenv., NFLD, CAN	SSB	QSX 2206.0 kHz
	VOK	CCG Cartwgt., NFLD, CAN	SSB	QSX 2206.0 kHz
	VON	CCG St. John's, NFLD, CAN	SSB	QSX 2206.0 kHz
	WLC	Rogers City R, MI, USA	SSB	QSX 2206.0 kHz
	8PO	Bridgetown R, BRB	SSB	
2583.0	FFD	Saint Denis R, REU	SSB	QSX 3314.0 kHz
	HLM	Mokp'o R, KOR	CW	
	HLN	Kunsan R, KOR	CW	
	HLP	Pusan R, KOR	CW	
	HLU	Taeha-dong R, U.d.I., KOR	CW	
	HLY	Yosu R, KOR	CW	
		Cheju R, KOR	CW	
		UNID teleprinter	**ITA2 100 encrypted**	
2585.0	WAH	Saint Thomas R, VIR	SSB	
2586.0	CNP	Casablanca R, MRC	SSB	
	J2A	Jibuti R, DJI	SSB	
	OXZ	Lyngby R, DNK	SSB	QSX 1995.0 / 2045.0 kHz
	TRA	Libreville R, GAB	SSB	
	TUA	Abidjan R, CTI	SSB	
	TYA	Cotonou R, BEN	SSB	
	3XC 5	Conakry R, GUI	SSB	
	5VA	Lome R, TGO	SSB	
	6VA	Dakar R, SEN	SSB	
	7TO	Oran R, ALG	SSB	
		Arrecife R, CNR	SSB	QSX 3231.0 kHz
		Machichaco R, E	SSB	QSX 3283.0 kHz
2587.0	6YI	Kingston R, JMC	SSB	
2590.0	JYO	Aqaba R, JOR	SSB	QSX 2057.0 kHz
	RTEU	Aleksandrov-S. R, FE, RUS	CW	
	SVN	Athens R, GRC	SSB	
	6YI	Kingston R, JMC	SSB	
2591.0	IPL	Livorno R, I	SSB	
2592.0	**DHJ 51**	**Grengel Meteo, D**	**ITA2 100 Bd: 1919+2114 wx**	
2593.0	CND	Agadir R, MRC	SSB	
	OXZ	Lyngby R, DNK	SSB	
2594.0	V5L 25	Lüderitz R, NMB	SSB	
	V5W 26	Walvis Bay R, NMB	SSB	
	ZSA	Cape Agulhas R, AFS	SSB	QSX 1700.0 kHz
	ZSE	East London R, AFS	SSB	
	ZSM	Cape Columbine R, AFS	SSB	QSX 1700.0 kHz
2595.0	S7Q	Victoria R, Mahe, SEY	SSB	
	UGE	Arkhangelsk R, RUS	SSB	QSX 2100.0 kHz
	5ZF	Mombasa R, KEN	SSB	
	7OA	Aden R, YEM	SSB	
2596.0		La Coruna R, E	SSB	QSX 3290.0 kHz
2598.0	VCK	CCG Sept Iles, QUE, CAN	SSB	
	VCM	CCG St. Anth., NFLD, CAN	SSB	
	VCP	CCG St. Lawr., NFLD, CAN	SSB	
	VOJ	CCG Stephenv., NFLD, CAN	SSB	
	VOK	CCG Cartwgt., NFLD, CAN	SSB	
	VON	CCG St. John's, NFLD, CAN	SSB	
2599.0		**UNID teleprinter**	**200**	
2600.0	FFD	Saint Denis R, REU	SSB	QSX 3317.0 kHz
	IQQ	Mazara del Vallo R, I	SSB	QSX 2023.0 kHz
	PCG	Scheveningen R, NLD	SSB	QSX 1995.0 kHz

2600.0	TFX	Siglufjoerdur R, ISL	SSB	
	XFA	Acapulco R, MEX	SSB	QSX 2622.0 kHz
	XSM	Xiamen R, CHN	SSB	
	XSS	Longkou R, CHN	SSB	
	XSV	Tianjin R, CHN	SSB	
2601.0	A7D	Doha R, QAT	SSB	
	D3E	Luanda R, AGL	SSB	QSX 2464.0 kHz
	D4A	Mindelo R, S. Vicente, CPV	SSB	
2604.0	A4M	Muscat R, OMA	SSB	
2605.0	UIK	Vladivostok R, SE, RUS	SSB	QSX 2720.0 kHz
	XSG	Shanghai R, CHN	SSB	
	XSH	Basuo R, CHN	SSB	
	XST	Qingdao R, CHN	SSB	
	YLQ	Riga R, LVA	SSB	
	9WH 20	K. Kinabalu R, Sb., MLA	SSB	
2606.0	V5L 26	Lüderitz R, NMB	SSB	
	V5W 8	Walvis Bay R, NMB	SSB	
	ZSA	Cape Agulhas R, AFS	SSB	
	ZSC 31	Cape Town R, AFS	SSB	QSX 2049.0 kHz
	ZSD 33	Durban R, AFS	SSB	
	ZSE	East London R, AFS	SSB	
	ZSM	Cape Columbine R, AFS	SSB	
	ZSQ 8	Port Elizabeth R, AFS	SSB	QSX 2049.0 kHz
2607.0	A4M	Muscat R, OMA	SSB	
	A9M	Hamala R, BHR	SSB	
	FUO	**FN Toulon, F**	**ITA2 75 Bd: 24 h ry**	
	SVK	Kerkyra R, GRC	SSB	
2608.3	*HZH*	*Jeddah R, ARS*	*scheduled; QSX 2113.3 kHz*	
2610.0	EAC	Tarifa R, E	SSB	QSX 3290.0 kHz
	ESA	Tallinn R, EST	SSB	
	XSG	Shanghai R, CHN	SSB	
2615.0	YUW	Bar R, SRB	SSB	
2616.0	KUP 65	Majuro R, MHL	SSB	
	KUP 66	Kolonia R, Pohnpei, FSM	SSB	
	KUP 67	Moen R, Truk, FSM	SSB	
	KUP 68	Koror R, PLW	SSB	
	KUP 69	Colonia R, Yap, FSM	SSB	
2618.5	*GFE 25*	*Bracknell Meteo, G*	*FAX $*	
2620.0	FJA	Papeete R, Tahiti, OCE	SSB	
	XSQ	Guangzhou R, CHN	SSB	
2622.0	AFE 70	USAF Cape Can., FL, USA	SSB	
2624.0	IQX	Trieste R, I	SSB	QSX 2023.0 kHz
	SVR	Rhodes R, GRC	SSB	

2625.0 - 2650.0 Region 1 = MARITIME MOBILE + MARITIME RADIONAVIGATION
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Regions 2 + 3 = FIXED + MOBILE

2625.0	TBH 2	TN Izmir, TUR	CW	
	UGC	**Saint Petersburg R, RUS**	**SITOR-A: 2100+2147 R tts wtsca** CW/SSB	
	9HD	Valetta R, MLT	SSB	
2627.0	XSU	Yantai R, CHN	SSB	
2628.0	*AXM 31*	*Melbourne Met., VIC, AUS*	*FAX $*	
	FFM	Marseille R, F	SSB	
	GNI	Niton R, G	SSB	QSX 2009.0 kHz
	IQA	Augusta R, I	SSB	
	TFV	Vestmannaeyjar R, ISL	SSB	QSX 2138.0 kHz
	9WW 20	Kuching R, Sarawak, MLA	SSB	

2629.0	TAI	Iskenderun R, TUR	SSB	
2632.0	IQH	Napoli R, I	SSB	QSX 2023.0 kHz
2634.0		**UNID teleprinter**	75	
2635.0	REGIONS 2 + 3 INTERSHIP WORKING FREQ.		SSB	
	CND 3	Safi R, MRC	SSB	
	CNW	Tanger R, MRC	SSB	
	LFO	Oerlandet R, NOR	SSB	QSX 3200.0 kHz
2638.0	REGIONS 2 + 3 INTERSHIP WORKING FREQ.		SSB	
	HIA	Sto. Domingo Pilot R, DOM	SSB	
	KUQ	Pago Pago R, SMA	SSB	
	OBF	Mollendo R, PRU	SSB	
2639.0	SPS	Witowo R, POL	SSB	QSX 2054.0 kHz
2640.4		**UNID teleprinter**	75	
2641.0	ODR 6	Beirut R, LBN	SSB	
2642.0	ICB	Genova R, I	SSB	
	J5M	Bissau R, GNB	SSB	QSX 2046.0 kHz
	LGV	Vardoe R, NOR	SSB	QSX 3203.0 kHz
	LGZ	Farsund R, NOR	SSB	QSX 3146.0 kHz
2643.5	**SPS**	**Witowo R, POL**	**SITOR-A: 24 h tts; QSX 2543.5 kHz**	
			CW	
2645.0	D4A	Mindelo R, S. Vicente, CPV	CW	
	TBO	TN Izmir, TUR	CW	
2646.0	LFO	Oerlandet R, NOR	SSB	
	LGL	Floroe R, NOR	SSB	QSX 3165.0 kHz
2649.0	EAS	Cabo Penas R, E	SSB	QSX 3231.0 kHz
	LGL	Floroe R, NOR	SSB	QSX 3217.0 kHz
	TKM	Grasse R, F	SSB	
	4XA	Elat R, ISR	SSB	
	4XO	Haifa R, ISR	SSB	

2650.0 - 2850.0 Region 1 = FIXED + MOBILE except aeronautical mobile (R)
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Regions 2 + 3 = FIXED + MOBILE

2650.0		Abidjan F R, CTI	SSB	
2651.5	**'RC2PAL'**	**ICRC Pale, BIH**	**PACTOR: 1527 tfc + msgs to 'RC2SAR' Sarajevo**	
	'RC2SAR'	**ICRC Sarajevo, BIH**	**PACTOR: 1527 tfc to 'RC2PAL' Pale**	
2652.0	5RN	Nosy Be R, MDG	SSB	
	5TA	Nouadhibou R, MTN	SSB	
		Mananjary R, MDG	SSB	
		Morondava R, MDG	SSB	
2653.0	LGQ	Rogaland R, NOR	SSB	QSX 1930.0 kHz
	XVR 4	Vung Tau R, VTN	SSB	
2655.0	XFF	Coatzacoalcos R, MEX	SSB	QSX 2165.0 kHz
2656.0	A9M	Hamala R, BHR	SSB	
	IPA	Ancona R, I	SSB	QSX 2023.0 kHz
	LGQ	Rogaland R, NOR	SSB	QSX 3210.0 kHz
	LGS	Svalbard R, Spitsbgn., NOR	SSB	
	VJQ	RFDS Kalgoorlie, WA, AUS	SSB	
	4XA	Elat R, ISR	SSB	
2657.0	CTC	PN Cascais, POR	SSB	
	CTH	PN Horta, AZR	SSB	
	CTN	PN Apulia, POR	SSB	
	CTQ	PN Porto Santo, MDR	SSB	
	CTS	PN Sagres, POR	SSB	
2660.0	LGP	Bodoe R, NOR	SSB	QSX 3274.0 kHz

2660.0	XSO	Wenzhou R, CHN	SSB	
	ZLGC	DOC Rotorua, NZL	SSB	
	9WW 21	Miri R, Sarawak, MLA	SSB	
2662.0	A3A	Nuku'alofa R, TON	SSB	
	SUH	Alexandria R, EGY	SSB	
	YKO	Tartous R, SYR	SSB	
2663.0	CNP	Casablanca R, MRC	SSB	
	FJN	Dzaoudzi R, MYT	SSB	
	IPC	Crotone R, I	SSB	QSX 2023.0 kHz
	LGP	Bodoe R, NOR	SSB	QSX 3207.0 kHz
	LGV	Vardoe R, NOR	SSB	
		Antalaha R, MDG	SSB	
2665.0	XFK	La Paz R, MEX	SSB	QSX 2160.0 kHz
2666.0	UHY	Murmansk R, RUS	SSB	
2667.0	LGN	Bergen R, NOR	SSB	QSX 3277.0 kHz
2670.0	GLD	Land's End R, G	SSB	
	LGN	Bergen R, NOR	SSB	QSX 3203.0 kHz
	NM./..	many USCG stations	SSB	
	TAH	Istanbul R, TUR	SSB	
	TAR	Zonguldak R, TUR	SSB	
	UNI	Ventspils R, LVA	CW/SSB	
	XSX	Chi-lung R, TAI	SSB	
	YUW	Bar R, SRB	SSB	
	3VT	Tunis R, TUN	SSB	
	5BA	Nicosia R, CYP	SSB	
2673.3	**DER**	**MOI Bonn, D**	**VFT: ARQ-E 96 Bd: 1639-0200 tfc or encrypted msg to Hannover [NIVHF]**	
2674.0	**DER**	**MOI Bonn, D**	**VFT: ARQ-E 96 Bd: 1746-0700 tfc or msgs to Bremen [HBVHF]**	
2676.0	LGZ	Farsund R, NOR	SSB	QSX 3214.0 kHz
2679.0		Cabo de Gata R, E	SSB	QSX 3283.0 kHz
2680.0	IDC	Cagliari R, I	SSB	
	S9M	Sao Tome R, STP	SSB	
	XSF	Lianyungang R, CHN	SSB	
	4XZ	IN Haifa, ISR	CW	
	9MG 4	Georgetown R, Pin. I., MLA	SSB	
2684.0	GKZ	Humber R, G	SSB	QSX 2002.0 kHz
2685.0	XFM	Manzanillo R, MEX	SSB	QSX 2290.0 kHz
	YUW	Bar R, SRB	SSB	
2685.3		**UNID teleprinter**	**300**	
2686.0	HSA 6	Bangkok R, THA	SSB	
		Songkhla R, THA	SSB	
2690.0	PKC	Palembang R, INS	SSB	QSX 2090.0 kHz
	PKC 4	Panjang R, INS	SSB	QSX 2090.0 kHz
	PKD	Surabaya R, INS	SSB	QSX 2090.0 kHz
	PKE	Amboina R, INS	SSB	QSX 2090.0 kHz
	PKF	Ujung Pandang R, INS	SSB	QSX 2090.0 kHz
	PKK	Kupang R, INS	SSB	QSX 2090.0 kHz
	PKM	Bitung R, INS	SSB	QSX 2090.0 kHz
	PKN	Balikpapan R, INS	SSB	QSX 2090.0 kHz
	PKT	Dili R, INS	SSB	QSX 2090.0 kHz
	PKX	Jakarta R, INS	SSB	QSX 2090.0 kHz
2690.7	**DHJ 51**	**Grengel Meteo, D**	**ITA2 100 Bd: 1910+2111+2127+2143+2150+2205 wx**	
2691.0	FFU	Brest - Le Conquet R, F	SSB	
	7TA	El Djaza'ir R, ALG	SSB	
2693.0	CUL	Lisbon R, POR	SSB	QSX 2054.0 kHz
	TAL	Antalya R, TUR	SSB	
2694.0	CLK	Nuevitas R, CUB	SSB	QSX 2827.0 kHz

2694.0	ZSA	Cape Agulhas R, AFS	SSB	QSX 2009.0 kHz
	ZSE	East London R, AFS	SSB	
	ZSM	Cape Columbine R, AFS	SSB	QSX 2009.0 kHz
2695.0	LGV	Vardoe R, NOR	SSB	QSX 3168.0 kHz
	URL	Sevastopol' R, UKR	SSB	
2699.0	HLP	Pusan R, KOR	SSB	
2700.0	TFM	Neskaupstadur R, ISL	SSB	QSX 2002.0 kHz
	5BA	Nicosia R, CYP	SSB	
2705.0	TNA	Pointe-Noire R, COG	SSB	
2710.0	IPD	Civitavecchia R, I	SSB	
	XFY	Guaymas R, MEX	SSB	QSX 2255.0 kHz
	XSR	Haikou R, CHN	SSB	
	9LL	Freetown R, SRL	SSB	
	'RDFEI'	**DM Fredrikshavn, DNK**	**ITA2 100 Bd: 2125-0655 ry**	
2711.5	CLT	Habana R, CUB	SSB	QSX 2802.0 kHz
2712.0	5RD	Tolanaro R, MDG	SSB	
	5RL	Antsiranana R, MDG	SSB	
		Maintirano R, MDG	SSB	
2716.0	**SAB**	**Goeteborg R, S**	**SITOR-A: 24 h tts; QSX 2477.0 kHz**	
	V5L 27	Lüderitz R, NMB	SSB	
2719.0	GCC	Cullercoats R, G	SSB	
	IZN	Porto Torres R, I	SSB	
	3VS	Sfax R, TUN	SSB	
	7TO	Oran R, ALG	SSB	
		Songkhla R, THA	SSB	
2720.0	*RDE 73*	*Samara Meteo, RUS*	*FAX 60/576: 2300 chart* *90/576: 2235 chart* *120/576: 2125 chart*	
	SPS	Witowo R, POL	SSB	QSX 2054.0 kHz
	UBC	Uglegorsk R, FE, RUS	SSB	
	UBR	Vanino R, FE, RUS	SSB	
	ULX	Aleksandrov-S. R, FE, RUS	SSB	
2722.0	ICB	Genova R, I	SSB	QSX 2023.0 kHz
	XFB	Ciudad del Carmen R, MEX	SSB	QSX 2255.0 kHz
2723.0	8PO	Bridgetown R, BRB	SSB	
2724.0	KUP 65	Majuro R, MHL	SSB	
	KUP 66	Kolonia R, Pohnpei, FSM	SSB	
	KUP 67	Moen R, Truk, FSM	SSB	
	KUP 68	Koror R, PLW	SSB	
	KUP 69	Colonia R, Yap, FSM	SSB	
	TFZ	Isafjoerdur R, ISL	SSB	QSX 2023.0 kHz
2725.0	XFE	Ensenada R, MEX	SSB	
	XFN	Progreso R, MEX	SSB	QSX 2555.0 kHz
	XFP	Chetumal R, MEX	SSB	QSX 2255.0 kHz
		UNID teleprinter	**100**	
2726.0	FFU	Brest - Le Conquet R, F	SSB	
	SPC	Gdynia R, POL	SSB	QSX 2057.0 kHz
2727.0	**DAN**	**Norddeich R, D**	**SITOR-A: 24 h tts; QSX 2538.0 kHz**	
			CW	
	JYO	*Aqaba R, JOR*	*scheduled; QSX 2154.0 kHz*	
2730.0	SVL	Limnos R, GRC	SSB	
	ZAD	Durres R, ALB	SSB	
2733.0	SDJ	Stockholm R, S	SSB	QSX 2216.0 kHz
	5RS	Toamasina R, MDG	SSB	
2735.0	9YL	North Post R, TRD	SSB	
2737.0	FFO	Saint Nazaire R, F	SSB	
2738.0	CBA	Antofagasta R, CHL	SSB	
	CBF	Juan Fernandez R, CHL	SSB	

2738.0	CBS	San Pedro R, CHL	SSB	
	CBV	Valparaiso R, CHL	SSB	
	CBX	Bahia Felix R, CHL	SSB	
	CBY	Hanga Roa R, PAQ	SSB	
	HIA	Sto. Domingo Pilot R, DOM	SSB	
	OBC	Callao R, PRU	SSB	
	OBY	Paita R, PRU	SSB	
	XSW	Kao-hsiung R, TAI	SSB	
		Port-au-Prince R, HTI	SSB	
2740.0	FFO	Saint Nazaire R, F	SSB	
	HPP 20	Panama R, PNR	SSB	
	STP	Port Sudan R, SDN	SSB	
2741.0	CUG	Ponta Delgada R, AZR	SSB	
		Horta R, Faial, AZR	SSB	
2745.0	XFQ	Salina Cruz R, MEX	SSB	QSX 2160.0 kHz
2746.0	HSA 7	Bangkok R, THA	SSB	
2747.0	FFB	Boulogne-sur-Mer R, F	SSB	
2748.0	YQI	Constanta R, ROU	SSB	
2749.0	VAU	CCG Yarmouth, NS, CAN	SSB	
	VCN	CCG Grindst. I., QUE, CAN	SSB	
	VCO	CCG Sydney, NS, CAN	SSB	
2750.0	CUG	Ponta Delgada R, AZR	SSB	QSX 2057.0 kHz
	LZL	Bourgas R, BUL	SSB	
	XSV	Tianjin R, CHN	SSB	
	9KK	Safat R, KWT	SSB	
		Horta R, Faial, AZR	SSB	QSX 2057.0 kHz
2752.0	C5G	Banjul R, GMB	SSB	
	YUW	Bar R, SRB	SSB	
2752.5	'RETWC'	Guardia Civil La Coruna, E	SITOR-A: 2130 tfc to 'RETWCP' Pontevedra	
	'RETWCP'	Guardia Civil Pontevedra, E	SITOR-A: 2130 msgs + tfc to 'RETWC' La Coruna	
2754.0	*CKN*	*CF Victoria, BC, CAN*	*FAX $*	
	SDJ	Stockholm R, S	SSB	QSX 2206.0 kHz
2755.0	C5G	Banjul R, GMB	SSB	
	ZBI	Georgetown R, ASC	SSB	
	5OW	Lagos R, NIG	SSB	
	9LL	Freetown R, SRL	SSB	
2756.0	XFS	Tampico R, MEX	SSB	QSX 2290.0 kHz
2758.0	OSU	Oostende R, BEL	SSB	
2760.0	CLC	Cienfuegos R, CUB	SSB	
	CLC 2	Isabela de Sagua R, CUB	SSB	
	CLF 2	Arroyos de Mantua R, CUB	SSB	
	CLK	Nuevitas R, CUB	SSB	
	CLK 2	Santa Cruz del Sur R, CUB	SSB	
	CLM	Santiago de Cuba R, CUB	SSB	
	CLM 3	Baracoa R, CUB	SSB	
	CLT	Habana R, CUB	SSB	
	CLT 3	Nueva Gerona R, CUB	SSB	
	TAF	Samsun R, TUR	SSB	
	TAN	Izmir R, TUR	SSB	
	TAO	Trabzon R, TUR	SSB	
	VCT	Tors Cove R, NFLD, CAN	SSB	QSX 3349.0 kHz
	9VG 5	Singapore R, SNG	SSB	QSX 2527.0 kHz
2761.0	OSU	Oostende R, BEL	SSB	
		UNID teleprinter	100	
2762.0	V5L 28	Lüderitz R, NMB	SSB	
	ZSD 35	Durban R, AFS	SSB	QSX 2049.0 kHz
2765.0	9KK	Safat R, KWT	SSB	
2768.0	A7D	Doha R, QAT	SSB	

2768.0	SAE	Tingstaede R, S	SSB	QSX 3289.0 kHz
		many RAN stations, AUS	SSB	
2768.5	CWF	Punta Carretas R, URG	SSB	QSX 2152.5 kHz
	DER	**MOI Bonn, D**	**VFT: ARQ-E 72 Bd: 24 h msg to München [GSVHF]**	
2769.5	**DER**	**MOI Bonn, D**	**VFT: ARQ-E 96 Bd: 0543+0700 msg to Mainz [RPVHF]**	
2770.2	**DER**	**MOI Bonn, D**	**VFT: ARQ-E 96 Bd: 1414-0657 tfc or msgs to Saarbrücken [SLVHF]**	
2771.0	YUW	Bar R, SRB	SSB	
2775.0	FFC	Arcachon R, F	SSB	
	7TA	El Djaza'ir R, ALG	SSB	
	7TB	Annaba R, ALG	SSB	
2780.0	CUL	Lisbon R, POR	SSB	QSX 2069.0 kHz
	S9M	Sao Tome R, STP	SSB	
2782.0	GLD	Land's End R, G	SSB	QSX 2111.0 kHz
	IPD	Civitavecchia R, I	SSB	
	WCM	Withamsville R, OH, USA	SSB	
	WFN	Jeffersonville R, IN, USA	SSB	
		UNID teleprinter	**150**	
2783.0	CLC	Cienfuegos R, CUB	SSB	QSX 2847.0 kHz
	CLC 2	Isabela de Sagua R, CUB	SSB	
	V5L 29	Lüderitz R, NMB	SSB	
	V5W 7	Walvis Bay R, NMB	SSB	QSX 2046.0 kHz
	XSJ	Zhanjiang R, CHN	SSB	
	ZSA	Cape Agulhas R, AFS	SSB	QSX 2356.0 kHz
	ZSE	East London R, AFS	SSB	
	ZSM	Cape Columbine R, AFS	SSB	QSX 2356.0 kHz
2787.5		**UNID teleprinter**	**ITA2 100 encrypted**	
2789.0	**FUE**	**FN Brest, F**	**ITA2 75 Bd: 24 h ry or clg FAAA**	
	IDF	Messina R, I	SSB	QSX 2023.0 kHz
	SAA	Karlskrona R, S	SSB	QSX 3185.0 kHz
2790.0	9MG 24	Georgetown R, Pin. I., MLA	SSB	
2792.0	VJB	RFDS Derby, WA, AUS	SSB	
2792.9		**UNID teleprinter**	**75**	
2794.0	CLM 3	Baracoa R, CUB	SSB	QSX 2830.0 kHz
2795.0	**ESA**	**Tallinn R, EST**	**SITOR-A: 0025+2140 R tts wtsca; QSX 3180.0 kHz**	
			CW	
2796.0		**UNID teleprinter**	**150**	
2799.0	EAO	Palma R, E	SSB	QSX 3283.0 kHz
	'RPFNSB'	**PN Sagres, POR**	**ITA2 75 Bd: 0300 ry**	
2800.0	UFA	Batumi R, GEO	SSB	QSX 2100.0 kHz
	4XZ	IN Haifa, ISR	CW	
2802.0	XFC	Cozumel R, MEX	SSB	QSX 2160.0 kHz
2803.0		Raippaluoto R, FIN	SSB	QSX 2002.0 kHz
2805.0	UTW	Mariupol R, UKR	SSB	QSX 3180.0 kHz
	XFL	Mazatlan R, MEX	SSB	QSX 2355.0 kHz
	XFU	Veracruz R, MEX	SSB	QSX 2670.0 kHz
	3XC 6	Conakry R, GUI	SSB	
2806.0	EAF	Finisterre R, E	SSB	QSX 3283.0 kHz
	IGJ 41	**IN Augusta, I**	**ITA2 100 Bd: 1930-0351 ry**	
2810.0	CUB	Funchal R, MDR	SSB	QSX 2111.0 kHz
	GKZ	Humber R, G	SSB	QSX 2562.0 kHz
	OHG	Helsinki R, FIN	SSB	QSX 2002.0 kHz
2814.0	OSU	Oostende R, BEL	SSB	
	XVG 91	Hai Phong R, VTN	SSB	
2815.0	IDR 8	IN Rome, I	CW	
	MTI	**RN Plymouth, G**	**ITA2 75 Bd: 0554+2150 channel status**	

2815.5	**OST**	**Oostende R, BEL**	**SITOR-A: 24 h tts; QSX 1971.5 kHz** **CW**
2816.0	**5AB**	**Benghazi R, LBY**	**SSB**
	9WH 20	**K. Kinabalu R, Sb., MLA**	**SSB**
2817.0	**OSU**	**Oostende R, BEL**	**SSB**
	SUH	**Alexandria R, EGY**	**SSB**
2818.0	**PZN**	**Paramaribo R, SUR**	**SSB**
2820.0	**EAL**	**Las Palmas R, CNR**	**SSB QSX 3290.0 kHz**
	TAM	**Mersin R, TUR**	**SSB**
	XSK 4	**Haimen R, CHN**	**SSB**
2822.0	**DHN 37**	**Grengel Meteo, D**	**ITA2 100 Bd: 24 h ry or wx**
2824.0	**PCG**	**Scheveningen R, NLD**	**SSB QSX 2520.0 kHz**
2829.5	**SPB**	**Szczecin R, POL**	**SITOR-A: 24 h tts; QSX 2529.5 kHz** **SITOR-B: 0200 + 0600 + 0700 + 1600 + 2200 tfc list** **CW**
2830.0	**SVK**	**Kerkyra R, GRC**	**SSB**
2831.0	***GNK***	***Norwick R, G***	***scheduled; QSX 2493.0 kHz***
	SPO	**Szczecin R, POL**	**SSB QSX 2051.0 kHz**
2832.7	**GNK**	**Norwick R, G**	**SITOR-A: 24 h tts; QSX 2577.0 kHz** **CW**
2833.0		**UNID teleprinter**	**192**
2836.0	**HLK**	**Gangreung R, KOR**	**SSB**
2840.0	**SUP**	**Port Said R, EGY**	**SSB**
2840.7		**GCG Cuxhaven, D**	**SITOR-A: 1647-0602 tfc**
2841.0	**EBA**	**SN Madrid, E**	**CW**
2841.9		**UNID teleprinter**	**150**
2842.0	**9WW 20**	**Kuching R, Sarawak, MLA**	**SSB**
		Chipiona R, E	**SSB QSX 3231.0 kHz**
2843.0	**CUB**	**Funchal R, MDR**	**SSB**
2845.0	**FJA**	**Papeete R, Tahiti, OCE**	**SSB**
	KUQ	**Pago Pago R, SMA**	**SSB**
	KUQ 23	**Swains Island R, SMA**	**SSB**
	PBB	**DN Den Helder, NLD**	**ITA2 75 Bd: 24 h channel status**

2850.0 - 3025.0	**AERONAUTICAL MOBILE (R)**	**<501 505>**
2851.0	AMS = AFI, 2A 3B 3C 9C 11B 13E 13F 14	SSB
2854.0	AMS = SAT, 3A 3B 6E 10B	SSB
2857.0	AMS = 2B 2C 6B 13J	SSB
2860.0	AMS = 1B 3A 3C 9B 10B 12E 12J 13I, VAFI	SSB
2863.0	AMS = 2A 2C 7B 13C 13J 13K, VPAC	SSB
2866.0	AMS = 2C 3C 4B 6D 10A	SSB
2869.0	AMS = CEP, 2A 2B 3A 6G 10E 13C 14G	SSB
2872.0	AMS = NAT, 3B 6A 6E 13G	SSB
2875.0	AMS = 2A 2B 3A 6G 10A 12G	SSB
2878.0	AMS = AFI, 3B 3C 11B 13I 13J 14	SSB
2881.0	AMS = 1B 2A 2B 3A 6C, VSAM	SSB
2884.0	AMS = 2C 3B 6D	SSB

2887.0		AMS = CAR, 2A 2B 3A 7E 13I 14C	SSB
2890.0		AMS = 1B 6G 13J	SSB
2892.3	**GYA**	**RN London, G**	**ITA2 75 Bd: 1002+2034+2121 channel status**
	MGJ	**RN Faslane, G**	**ITA2 75 Bd: 1800-0823 channel status**
2893.0		AMS = 2C 3 4B 10D 12F	SSB
2896.0		AMS = 2A 2B 3A 6G	SSB
2899.0		AMS = NAT, 5D 6G 13H	SSB
2902.0		AMS = 2B 2C 3B 6G 12J	SSB
2905.0		AMS = 3A 3C 5C 9B, VNAT	SSB
2908.0		AMS = 2B 2C 3B 13M	SSB
		UNID teleprinter	200
2911.0		AMS = 3A 5B 6G 10A	SSB
2914.0		AMS = 2B 2C 3B 13D	SSB
2917.0		AMS = 2A 6E 6G	SSB
2920.0		AMS = 2B 2C 6B 12C 13J	SSB
2923.0		AMS = 3A 6A	SSB
2926.0		AMS = 2A 2C 4A 6F 10C 12J	SSB
2929.0		AMS = 2B 9J	SSB
2929.3	FDC	FAF Metz, F	CW
2932.0		AMS = NP, 2A 2C 13K	SSB
2935.0		AMS = SAT, 3 10D	SSB
2938.0		AMS = 2 6G	SSB
2941.0		AMS = 2A 6F	SSB
2944.0		AMS = MID SAM, 10A 10E 14G	SSB
2947.0		AMS = 6A	SSB
2950.0		AMS = 2 3C 7C 10F 12A 14A 14D, VCAR	SSB
2953.0		AMS = 4A 6G	SSB
2956.0		AMS = 6C 7F 10A 12E 12F 12G 12H 13F, VMID	SSB
2959.0		AMS = 3A	SSB
2962.0		AMS = NAT, 6G	SSB
2965.0		AMS = 1E 7B 10C 12F 12J 13H, VSEA	SSB
2968.0		AMS = 3B 5B 6G	SSB
2971.0		AMS = NAT, 5D 6G 13G	SSB
2974.0		AMS = 1D 3C	SSB
2977.0		AMS = 1C 6G 13M	SSB
2980.0		AMS = 1D 3C 12C	SSB
2983.0		AMS = 1C 6G 13D	SSB
2986.0		AMS = 3C 5A 13N	SSB
2989.0		AMS = 1D 6G	SSB
2992.0		AMS = MID, 10A 10E 13C	SSB
2995.0		AMS = 6G	SSB
2998.0		AMS = CWP, 7D 12E 12F 12G 12H 13F, VEUR	SSB
3001.0		AMS = 6A 6E	SSB
3004.0		AMS = NCA, 11B 13K	SSB
3007.0		AMS = W II/III	SSB
3010.0		AMS = W I/IV	SSB
3013.0		AMS = W II/IV	SSB
3016.0		AMS = EA NAT, 9D 13G	SSB

3019.0		AMS = NCA, 11B 13K	SSB	
3023.0	WORLDWIDE	CALLING/DISTRESS/SAFETY FREQ.	CW/SSB	

3025.0 - 3155.0 AERONAUTICAL MOBILE (OR)

3026.0		AMS	SSB	
3027.0		**UNID teleprinter**	**81**	
3029.0		AMS	SSB	
3029.7		**GCG Neustadt, D**	**SITOR-A: 0601 + 2253 msg (position report)**	
3032.0		AMS	SSB	
	AXF	RAAF Sydney, NSW, AUS		
	AXH	RAAF Townsv., QLD, AUS		
	AXI	RAAF Darwin, NT, AUS		
	AXJ	RAAF Perth, WA, AUS		
	ZKX	RNZAF Auckland, NZL		
3035.0		AMS	SSB	
3038.0		AMS	SSB	
3041.0		AMS	SSB	
	AFE 70	USAF Cape Can., FL, USA		
3043.0		**UNID teleprinter**	**150**	
3044.0		AMS	SSB	
3047.0		AMS	SSB	
3050.0		AMS	SSB	
3053.0		AMS	SSB	
3056.0		AMS	SSB	
3059.0		AMS	SSB	
3062.0		AMS	SSB	
3065.0		AMS	SSB	
3068.0		AMS	SSB	
3071.0		AMS	SSB	
3074.0		AMS	SSB	
3077.0		AMS	SSB	
3080.0		AMS	SSB	
3083.0		AMS	SSB	
3086.0		AMS	SSB	
3089.0		AMS	SSB	
3092.0		AMS	SSB	
3095.0		AMS	SSB	
3098.0		AMS	SSB	
3101.0		AMS	SSB	
3104.0		AMS	SSB	
3107.0		AMS	SSB	
3110.0		AMS	SSB	
3113.0		AMS	SSB	
3116.0		AMS	SSB	
		Khabarovsk Air, SE, RUS		
		Magadan Air, FE, RUS		
3119.0		AMS	SSB	
3120.0	AFE 70	USAF Cape Can., FL, USA	SSB	
3121.9		**UNID teleprinter**	**150**	
3122.0		AMS	SSB	
	NMC	USCG S. Franc., CA, USA		
	NMG	USCG N. Orleans, LA, USA		
	NMN	USCG Portsm., VA, USA		
3125.0		AMS	SSB	
	OYR	Aasiat R, GRL	SSB	QSX 1868.0 kHz
3128.0		AMS	SSB	
3131.0		AMS	SSB	

3134.0		AMS	SSB
3137.0		AMS	SSB
3140.0		AMS	SSB
		UNID teleprinter	200
3143.0		AMS	SSB
	DHM 91	GAF Münster, D	
3146.0		AMS	SSB
3147.0		ship stations	QSX 1646.0 kHz (LGF 2)
3149.0		AMS	SSB
3152.0		AMS	SSB

3155.0 - 3200.0 FIXED + MOBILE except aeronautical mobile (R) <506 507>

3156.2		UNID teleprinter	150
3158.0		many IAF stations, I	SSB
3159.0	9MR	MN Johor Baharu, MLA	ITA2 75 Bd: 1204-2244 ry
3159.5		UNID teleprinter	100
3160.0	UCY	Astrakhan' R, RUS	CW
	UKW	Korsakov R, FE, RUS	CW
3161.5		UNID teleprinter	100
3162.0	ZHH	Jamestown R, SHN	SSB
3165.0	9YL	North Post R, TRD	SSB
3167.0	'P'	Beacon Kaliningrad, RUS	CW
3170.0	EZM	Krasnovodsk R, TKM	SSB
3171.0	TXU	Saint-Pierre R, SPM	SSB
3172.5	IMB 1	Rome Meteo, I	ITA2 50 Bd: 24 h ry or wx
3175.0	OZW	Qanaaq R, GRL	SSB
3177.5	AWC	Calcutta Air, IND	ITA2 50 Bd: 2100 ry, 2120 msgs, 2230 ry
3180.0	PKA	Sabang R, INS	SSB QSX 2080.0 kHz
	PKB	Belawan R, INS	SSB QSX 2080.0 kHz
	PKG	Banjarmasin R, INS	SSB QSX 2080.0 kHz
	PKN 6	Samarinda R, INS	SSB QSX 2080.0 kHz
	PKO	Tarakan R, INS	SSB QSX 2080.0 kHz
	PKP	Dumai R, INS	SSB QSX 2080.0 kHz
	PKP 2	Teluk Bayur R, INS	SSB QSX 2080.0 kHz
	PKR	Semarang R, INS	SSB QSX 2080.0 kHz
	PKS	Pontianak R, INS	SSB QSX 2080.0 kHz
	PNK	Jayapura R, INS	SSB QSX 2080.0 kHz
	UNI	Ventspils R, LVA	CW/SSB
		ship stations	QSX 2795.0 kHz (ESA)
3181.0	RMP	CISN Kaliningrad, RUS	CW
3185.0	UNI	Ventspils R, LVA	CW
	YLQ	Riga R, LVA	CW
3187.0	AFE 70	USAF Cape Can., FL, USA	SSB
3188.0	3BT 2	Vacoas Meteo, MAU	ITA2 75 Bd: 0030 + 0330 + 0630 + 0930 + 1230 + 1530 + 1830 wx
3190.0	USU	Mariupol R, UKR	CW
3191.0		many NATO st., BIH/HRV	SSB
3196.0		Prague Meteo, CZE	ITA2 50 Bd: 24 h ry or wx
3199.0		UNID teleprinter	75

3200.0 - 3230.0 BROADCASTING + FIXED + MOBILE except aeronautical mobile (R) <503 506>

3200.0	T3L 3	MILIPI Tabuaeran, KIR	SSB
	T3L 4	MILIPI Teraina, KIR	SSB
3202.0	EQM	Bushire R, IRN	SSB

3202.5	UNI	Ventspils R, LVA	CW
	YLQ	Riga R, LVA	CW
3208.0	'P'	Beacon Kaliningrad, RUS	CW
3210.0	LYK	Klaipeda R, LTU	ITA2 50 Bd: 1655-2135 R ry or tts wtsca; QSX 2100.0 kHz
			CW
	UDJ	Mezen' R, RUS	SSB
3215.0	LYL	Klaipeda R, LTU	CW/SSB
	UGC	Saint Petersburg R, RUS	SITOR-A: 1758-0504 R tts wtsca
			CW/SSB
3219.5	'RETWB'	Guardia Civil Barcelona, E	SITOR-A: 1750+2140 tfc
	'RETWBG'	Guardia Civil Gerona, E	SITOR-A: 1940 msg
	'RETWBM'	Guardia Civil Manresa, E	SITOR-A: 2220 msg
3228.0	AFS	USAF AWS Om., NE, USA	ITA2 75 Bd: 0000-1025 wx

3230.0 - 3400.0 BROADCASTING + FIXED + MOBILE except aeronautical mobile <503 506 508>

3230.0	ESP	Pärnu R, EST	SSB
3232.0	*AFS*	*USAF AWS Om., NE, USA*	*FAX 120/576: 1808-0415 charts*
3240.0	'LEONE'	IA IFOR Rome, I	SSB
3245.0	UCE	Arkhangelsk R, RUS	SITOR-A: 1615 R tts wtsca
			SITOR-B: 1900 tfc list
3245.5		UNID teleprinter	MFSK
3246.0	ZLBC	GPO Campbell Island, NZL	SSB
	ZME	GPO Raoul I., Krm. Is., NZL	SSB
3247.5	EQL	Anzali R, IRN	SSB
3250.0	EIP	Shannon Air, IRL	ITA2 50 Bd: 0154 msg, 2121+2350 ry
	OZL	Ammassalik R, GRL	SSB QSX 2090.0 kHz
	OZW	Qanaaq R, GRL	SSB
	UDK	Murmansk R, RUS	CW
3253.0	*VFF*	*CCG Iqaluit, NWT, CAN*	*FAX $*
	VFR	*CCG Resolute, NWT, CAN*	*FAX $*
3258.0		UNID teleprinter	200
3261.0	ZLJE	MRS Leeston, NZL	SSB
3264.0	RMP	CISN Kaliningrad, RUS	CW
3265.0		UNID teleprinter	200
3267.5		ship stations	QSX 2423.5 kHz (SAB)
3272.0		UNID teleprinter	75
3273.0		Düsseldorf, D	ARQ-E 96 Bd: 24 h msg to Hamburg [PHVNW]
3276.0	OYR	Aasiat R, GRL	SSB QSX 2310.0 kHz
3280.0	OLX	Prague, CZE	CW
	OYR	Aasiat R, GRL	SSB QSX 1995.0 kHz
	RBX 70	*Tashkent Meteo, UZB*	*FAX $*
3282.0	HKC	Buenaventura R, CLM	SSB
3282.3	CSP 20	Guarda Police, POR	SITOR-B: 0709+2100-0011 msgs
3286.5	CKN	CF Victoria, BC, CAN	ITA2 75 Bd: 0600 ry
3303.5		many stations, BIH	SSB
3306.5	FDE 2	FAF Tours, F	CW
3310.0	ESA	Tallinn R, EST	SSB
	UTT	Odessa R, UKR	SSB QSX 3180.0 kHz
3330.0	CHU	Ottawa TS, ONT, CAN	CW/SSB
	FUN	FN Lorient, F	CW
3331.5	ICA	IN Ancona, I	SSB
3340.0		CP Marsala, I	SSB
3345.0	ZKYX	MRS Tukino, NZL	SSB
		UNID teleprinter	75

3350.0	**BAA**	**Beijing Meteo, CHN**	**ITA2 50 Bd: 1334 + 1911 + 2140 + 2131 + 2151 wx**
3357.0	*NAM*	*USN Norfolk, VA, USA*	*FAX $*
	ZKHQ	NZCD Wellington, NZL	SSB
	ZKNT	NZCD Auckland, NZL	SSB
	ZKST	NZCD Christchurch, NZL	SSB
3358.0	TBH 3	TN Izmir, TUR	CW
3360.0	*RPN 71*	*Kiyev Meteo, UKR*	*FAX 60/576 or 90/576: 1840-0105 charts*
3365.0	AFE 70	USAF Cape Can., FL, USA	SSB
	JMJ	*Tokyo Meteo, J*	*FAX $*
3366.0		**UNID teleprinter**	**81**
3377.0	*YMA 20*	*Ankara Meteo, TUR*	*FAX $*
3379.5	FDI 22	FAF Narbonne, F	CW
3380.0		**UNID teleprinter**	**300**
3384.0		R Moscow feeder, RUS	ISB
3390.0	**MGJ**	**RN Faslane, G**	**ITA2 75 Bd: 1527-0551 time**
3394.0	**NAU**	**USN Roosev. R., Cb, PTR**	**ITA2 75 Bd: 0915 foxes**

3400.0 - 3500.0 AERONAUTICAL MOBILE (R)

3401.0		AMS = 2B 2C 3B 9B 12C 13K	SSB
3404.0		AMS = 3A 3C 9C 9D 10B, VAFI	SSB
3407.0		AMS = 2B 2C 3B 7C 12D 14D	SSB
3410.0		AMS = 1D 3C 11B 13J	SSB
3413.0		AMS = CEP, 3B 6G 13C 14A 14E, VEUR	SSB
3416.0		AMS = 1D 2A 2B 3A 6D	SSB
3419.0		AMS = AFI, 3B 3C 9B 10D 12J 13I	SSB
3422.0		AMS = 2A 2B 3A 6G	SSB
3425.0		AMS = AFI, 3B 3C 9B 10D 13D	SSB
3428.0		AMS = 2B 2C 11B 13J	SSB
3431.0		AMS = 3A 3B 5B 6G	SSB
3434.0		AMS = 2A 2C 6F 11B 13G	SSB
3434.9		RN Preston, G	ITA2 100 Bd: 2002-0834 ry or encrypted tfc
3436.0	MTI	RN Plymouth, G	ITA2 75 Bd: 24 h channel status
3437.0		AMS = 3B 4A 6G 13M	SSB
3440.0		AMS = 2A 2C 6F 12	SSB
3442.7		UNID station (1196)	PACTOR: 2216 compressed or encrypted tfc
3443.0		AMS = 3A 3B 4B 6E 11B 13N	SSB
3446.0		AMS = 1D 6G 10E 13F 14	SSB
3449.0		AMS = 2B 2C 6G 10A 13M	SSB
3451.5	'78'	IN Dublin, IRL	SITOR-A: 0556 msg (5lgs), final tfc, s. off; 0707 tfc, 1741-0007 tfc or msg (5lgs) to '58' SITOR-B: 2050 tfc
3452.0		AMS = SAT, 3A 3C 5A 5C 14C	SSB
3455.0		AMS = CAR CWP, 2A 2C 7B 13H	SSB

3458.0		AMS = 1B 10D 13C 13J 13K, VSEA	SSB
3458.6		UNID station (1295)	PACTOR: 2222 tfc, s. off
3461.0		AMS = 7F 9C 12E 12F 12G 12H 14, VNCA	SSB
3464.0		AMS = 1C 6G 12C 13K	SSB
	FXD	Dzaoudzi Meteo, MYT	SSB
	FXE	Europa Island Meteo, REU	SSB
	FXJ	Juan de Nova Meteo, REU	SSB
	FXR	Saint Denis Meteo, REU	SSB
	FXT	Tromelin I. Meteo, REU	SSB
	FXZ	Glorieuses Is. Meteo, REU	SSB
3467.0		AMS = AFI MID SP, 10B 13D	SSB
3470.0		AMS = SEA, 1C 10A 13G	SSB
3473.0		AMS = MID, 1B 6C 10E 13C	SSB
3476.0		AMS = INO NAT, 9B 13F	SSB
3479.0		AMS = EUR SAM, 6A 6B 14	SSB
3482.0		AMS = 5D 6G	SSB
3485.0		AMS = EA SEA, 7E 13H, VNAT	SSB
3488.0		AMS = 1B 5B 6B 10B 12E 12F 12G 12H 14B 14F	SSB
3491.0		AMS = EA, 1E 4A 10C 13E	SSB
3493.7		UNID station (196)	PACTOR: 1705 compressed or encrypted tfc ending "stop_7+. (FWHA110A.7PL) [202186B8]", s. off
3494.0		AMS = W II	SSB
3497.0		AMS = W II	SSB
3500.0 - 3750.0		Region 1 = AMATEUR + FIXED + MOBILE except aeronautical mobile <484 570> Region 2 = AMATEUR <509 510 511> Region 3 = AMATEUR + FIXED + MOBILE <510>	
3523.0		UNID teleprinter	300
3530.0	UGH	Provideniya R, FE, RUS	CW
3535.0	6YI	Kingston R, JMC	CW/SSB
3538.4		UNID teleprinter	150
3540.0	UGC	Saint Petersburg R, RUS	CW
3542.7	GKE	Portishead R, G	SITOR-A: 1806-1024 tts; QSX 2574.0 kHz SITOR-B: 2130 wx CW
3550.0	YMA 20	Ankara Meteo, TUR	ITA2 50 Bd: 1206-0516 ry or wx
3558.0	5ST	Antananarivo Meteo, MDG	ITA2 100 Bd: 0250 wx
3560.0	YKW 1	SANA Damascus, SYR	ITA2 50 Bd: 1600 A nx, 1700 F nx, 1800 E nx
3590.0	UFH	Petropavl.-Km. R, FE, RUS	CW
3597.0		UNID teleprinter	200
3600.0		UNID teleprinter	75
3601.0	CUL	Lisbon R, POR	SSB QSX 3336.0 kHz
3605.0	UQB	Kholmsk R, FE, RUS	CW

3607.3	GKZ	Humber R, G	SITOR-A: 1550-0846 tts; QSX 2496.3 kHz CW
3610.0	GLD	Land's End R, G	SSB QSX 2120.0 kHz
3613.0	SVK	Kerkyra R, GRC	SSB
3615.7	GKY 8	Portishead R, G	SITOR-A: 0341+2143+2208 tts CW
3622.5	*JMH*	*Tokyo Meteo, J*	*FAX $*
3624.0	YKM 7	Al Ladhiqiyah R, SYR	SSB
3625.0	UFJ	Rostov-na-Donu R, RUS	CW
3627.0		UNID teleprinter	300
3628.0	LFO	Oerlandet R, NOR	SSB QSX 2463.0 kHz
	7OA	Aden R, YEM	SSB
3628.7	'RFFP'	MOD Paris, F	ARQ-M2 200 Bd: B: 0630+1644-0340 tfc or AFTN msg to 'RFFVAY' Sarajevo [FDX]
3629.0	OSU	Oostende R, BEL	SSB
3630.0	SVR	Rhodes R, GRC	SSB
	UFA	Batumi R, GEO	SSB
3631.0	LGN	Bergen R, NOR	SSB QSX 2449.0 kHz
	LGV	Vardoe R, NOR	SSB QSX 2449.0 kHz
3632.0	OSU	Oostende R, BEL	SSB
3635.0	IQA	Augusta R, I	SSB
	YMB 20	Bandirma Meteo, TUR	CW
3638.0	LGQ	Rogaland R, NOR	SSB QSX 2456.0 kHz
3641.0	BMB	T'ai-pei Meteo, TAI	CW
3642.0	IZN	Porto Torres R, I	SSB
3645.0	LGL	Floroe R, NOR	SSB QSX 2466.0 kHz
	LGS	Svalbard R, Spitsbgn., NOR	SSB QSX 2541.0 kHz
3648.0	TAI	Iskenderun R, TUR	SSB
3649.0	'P'	Beacon Kaliningrad, RUS	CW
3650.0	3BT	Vacoas Meteo, MAU	SSB
		Agalega Is. Meteo, MAU	SSB
		Port Mathurin Meteo, ROD	SSB
		Saint Brandon Meteo, MAU	SSB
3651.5	SXA 32	GN Piraeus, GRC	CW
3652.0	*GYA*	*RN London, G*	*FAX $*
	LGV	Vardoe R, NOR	SSB QSX 2442.0 kHz
	LGZ	Farsund R, NOR	SSB QSX 2442.0 kHz
	OSU	Oostende R, BEL	SSB
3655.0	OSU	Oostende R, BEL	SSB
3656.0	4XA	Elat R, ISR	SSB
	4XO	Haifa R, ISR	SSB
3657.0	*RVZ 73*	*Arkhangelsk Meteo, RUS*	*FAX 60/576: 0520+0800+1030+1330+1400+1630-2350 charts*
3670.0		UNID teleprinter	ITA2 75 encrypted
3673.0	A7D	Doha R, QAT	SSB
3678.0	SXH	GN Khania, GRC	CW
3681.0	OSU	Oostende R, BEL	SSB
3684.0	OSU	Oostende R, BEL	SSB
3685.0	SXA 2	GN Piraeus, GRC	CW
3690.0	*RBV 70*	*Tashkent Meteo, UZB*	*FAX 90/576: 2100+2140+2345 charts*
3708.0		UNID teleprinter	MFSK 12
3710.0	*RGJ 61*	*Samara Meteo, RUS*	*FAX // 2720.0 kHz*
3712.0	SXA 33	GN Piraeus, GRC	CW
3722.0	FFB	Boulogne-sur-Mer R, F	SSB
	FFC	Arcachon R, F	SSB
	FFU	Brest - Le Conquet R, F	SSB

3722.0	TKM	Grasse R, F	SSB
3730.0	LYL	Klaipeda R, LTU	ITA2 50 Bd: 2200 R tts wtsca CW
3735.0	IQH	Napoli R, I	SSB
		UNID teleprinter	200
3737.0	UIW	Kaliningrad R, RUS	CW
3738.0		UNID teleprinter	75
3740.0	LZW 17	Varna R, BUL	SSB QSX 4115.7 kHz
3742.0	A4M	Muscat R, OMA	SSB
3745.0	A4M	Muscat R, OMA	SSB
	A9M	Hamala R, BHR	SSB
	HZN	Jeddah Meteo, ARS	ITA2 100 Bd: 2014-0411 wx

3750.0 - 3800.0 Region 1 = AMATEUR + FIXED + MOBILE
except aeronautical mobile <484 510>
Region 2 = AMATEUR + FIXED + MOBILE except aeronautical mobile (R) <510 511 512 514 515>
Region 3 = AMATEUR + FIXED + MOBILE <510>

3750.0	C5G	Banjul R, GMB	SSB
	RBV 71	Tashkent Meteo, UZB	ITA2 50 Bd: 1553-2150 wx
3751.0		UNID teleprinter	81
3763.5	C5G	Banjul R, GMB	SSB
3764.0	LZL	Bourgas R, BUL	SSB
3765.0	4XA	Elat R, ISR	SSB
3768.5	FDC	FAF Metz, F	CW
3774.0		UNID teleprinter	100
3780.0	BZC 75	Ürümqi Meteo, CHN	ITA2 50 Bd: 1558+2142+2152 wx
	TBA	TN Ankara, TUR	CW
3782.0	CTP	NATO Lisbon, POR	CW
3790.0	EBA	SN Madrid, E	CW
	FDE	FAF Villacoublay, F	CW
3792.0	FFO	Saint Nazaire R, F	SSB
3793.0	SVL	Limnos R, GRC	SSB
3795.0	FFB	Boulogne-sur-Mer R, F	SSB
	FFM	Marseille R, F	SSB
	FFO	Saint Nazaire R, F	SSB
	GYA	RN London, G	ITA2 75 Bd: 0740 clg MTT
3795.5	TBB	TN Ankara, TUR	CW

3800.0 - 3900.0 Region 1 = AERONAUTICAL MOBILE (OR) + FIXED + LAND MOBILE
Region 2 = AMATEUR + FIXED + MOBILE except aeronautical mobile (R) <510 511 512 514 515>
Region 3 = AMATEUR + FIXED + MOBILE <510>

3801.6	'RC2PAL'	ICRC Pale, BIH	PACTOR: 1740 tfc to 'RC2SAR' Sarajevo
	'RC2SAR'	ICRC Sarajevo, BIH	PACTOR: 1714 msgs (E REUTER nx) + msgs, 1740 msgs to 'RC2PAL' Pale
3802.0	'RC2BEL'	ICRC Belgrade, SRB	PACTOR: 1826 tfc to 'RC2MBO' Zagreb
	'RC2KNI'	ICRC Knin, HRV	PACTOR: 1850 tfc to 'RC2MBO' Zagreb

3802.0	'RC2MBO'	ICRC Zagreb, HRV	PACTOR: 1805-1850 msgs to 'RC2BEL' Belgrade or 'RC2KNI' Knin or 'RC2PAL' Pale or 'RC2ZAG' Zagreb
	'RC2PAL'	ICRC Pale, BIH	PACTOR: 1805 tfc to 'RC2MBO' Zagreb
	'RC2SAR'	ICRC Sarajevo, BIH	PACTOR: 1744 msg
	'RC2ZAG'	ICRC Zagreb, HRV	PACTOR: 1824 tfc to 'RC2MBO' Zagreb
3802.9		UNID teleprinter	150
3803.2	'RFFP'	MOD Paris, F	ARQ-M2 200 Bd: A: 2244 msg to 'RFFVAY' Sarajevo [FDXA] B: 2244 tfc to 'RFFVAY' Sarajevo [PVX]
3803.6	HB8 GVA	ICRC Geneva, SUI	PACTOR: 1725 msg to 'RC2ZAG' Zagreb
	'RC2BAL'	ICRC Banja Luka, BIH	PACTOR: 1635 msg
	'RC2BIJ'	ICRC Bijeljina, BIH	PACTOR: 1726 tfc
	'RC2ZAG'	ICRC Zagreb, HRV	PACTOR: 1725 tfc to HB8 GVA Geneva
3804.4	'RC2OSI'	ICRC Osijek, HRV	PACTOR: 1818 tfc to 'RC2ZAG' Zagreb
	'RC2ZAG'	ICRC Zagreb, HRV	PACTOR: 1818 msg + tfc to 'RC2OSI' Osijek
3806.5		UNID teleprinter	81
3807.0	HBK 70	UNID SKH station (296)	PACTOR: 1712 final tfc to HBK 71, s. off
	HBK 71	UNID SKH station (296)	PACTOR: 1712 final tfc to HBK 70, s. off
	'P'	Beacon Kaliningrad, RUS	CW
3809.0		UNID teleprinter	200
3810.0	HD2 IOA	Guayaquil TS, EQA	CW/SSB
	RST 75	*Mensk Meteo, BLR*	*FAX 90/576: 1700-0832 charts*
		UNID station (996)	ALIS: 1630 msg (5lgs) fm "bmi leitstelle"
3818.0	'RC2MBO'	ICRC Zagreb, HRV	PACTOR: 1741 msg to 'RC2TUZ' Tuzla, 1811 tfc to 'RC2ZAG' Zagreb
	'RC2SAR'	ICRC Sarajevo, BIH	PACTOR: 1723 msg to 'RC2ZEN' Zenica
	'RC2TUZ'	ICRC Tuzla, BIH	PACTOR: 1741 tfc to 'RC2MBO' Zagreb
	'RC2ZAG'	ICRC Zagreb, HRV	PACTOR: 1811 msg to 'RC2MBO' Zagreb
	'RC2ZEN'	ICRC Zenica, BIH	PACTOR: 1723 tfc to 'RC2SAR' Sarajevo
		UNID teleprinter	81
3820.5	*NRK*	*USN Keflavik, ISL*	*FAX // 3357.0 kHz $*
3822.0		UNID teleprinter	75
3826.0		UNID teleprinter	200
3830.0	'HCBSNZE'	UNO Zenica, BIH	PACTOR: 2115 msgs to 'HCHRVZA' Zagreb
	'HCHRVZA'	UNO Zagreb, HRV	PACTOR: 1820 msg (E REUTER nx), 2115 msgs + tfc to 'HCBSNZE' Zenica
3831.0		MFA Tunis, TUN	FEC-A 96 Bd: 1618-1626 encrypted msgs
3831.7	'HCHRVZA'	UNO Zagreb, HRV	PACTOR: 1630 tfc

3832.7	**'RFFP'**	**MOD Paris, F**	**ARQ-M2 200 Bd: A: 1615-2354 tfc or msgs (5lgs) to 'RFFVAY' Sarajevo [FDXA]** **B: 0524 tfc to 'RFFVAY' Sarajevo, 1653 operational tfc to 'RFFVAY', 1846 AFTN msg to 'RFFVAY' [FDX]**
3833.0	**FDC**	**FAF Metz, F**	**CW**
3836.0		**UNID teleprinter**	**200**
3838.0		**UNID teleprinter**	**300**
3841.1		**MFA Bucharest, ROU**	**RUM-FEC 164 Bd: 1602 encrypted tfc**
3847.7		**UNID teleprinter**	**200**
3850.0	**ETD 3**	**Addis Ababa Air, ETH**	**ITA2 50 Bd: 2000+2120 "ch", 2131 msg**
3851.3		**Erfurt, D**	**VFT: ARQ-E 96 Bd: 0701-2058 tfc or operational msg to DER Bonn [HFVTH]**
3855.0	*DDH 3*	*Hamburg Meteo, D*	*FAX $*
3861.0		**UNID MOI station, D (196)**	**VFT: ARQ-E 86 Bd: 0835 encrypted tfc; QSX 4944.0 kHz**
3875.0	*RCI 72*	*Moscow Meteo, RUS*	*FAX // 53.6 kHz $*
3875.5		UNID teleprinter	100
3881.0	FAV 22	FA Mont-Valerien, F	CW
3884.4	ASK	Karachi R, PAK	SSB

3900.0 - 3950.0
Region 1 = AERONAUTICAL MOBILE (OR) <513>
Region 2 = AMATEUR + FIXED + MOBILE except aeronautical mobile (R) <510 511 512 514 515>
Region 3 = AERONAUTICAL MOBILE + BROADCASTING

3900.0		AMS (Region 1)	SSB
3903.0		AMS (Region 1)	SSB
3906.0		AMS (Region 1)	SSB
3909.0		AMS (Region 1)	SSB
3912.0		AMS (Region 1)	SSB
3915.0		AMS (Region 1)	SSB
3916.8		**UNID teleprinter**	**73**
3918.0		AMS (Region 1)	SSB
3921.0		AMS (Region 1)	SSB
3922.0		**UNID MOI station, D (1196)**	**VFT: ARQ-E 86 Bd: 0654+0835+0838+1610+1710 encrypted tfc; QSX 4944.0 kHz**
3924.0		AMS (Region 1)	SSB
3927.0		AMS (Region 1)	SSB
3930.0		AMS (Region 1)	SSB
3933.0		AMS (Region 1)	SSB
3936.0		AMS (Region 1)	SSB
3939.0		AMS (Region 1)	SSB
3942.0		AMS (Region 1)	SSB
3945.0		AMS (Region 1)	SSB

3950.0 - 4000.0
Region 1 = BROADCASTING + FIXED
Region 2 = AMATEUR + FIXED + MOBILE except aeronautical mobile (R) <510 511 512 514 515>
Region 3 = BROADCASTING + FIXED <516>

3959.0	**SUU**	**Cairo Meteo, EGY**	**ITA2 100 Bd: 2130-0227 wx**

3982.4		UNID teleprinter	192
4000.0 - 4063.0		FIXED + MARITIME MOBILE	<516 517>
4000.0		ship stations, ch 1	SSB
4002.0	YRR 2	Bucharest Meteo, ROU	ITA2 50 Bd: 1718-0522 wx
4003.0		ship stations, ch 2	SSB
4006.0		ship stations, ch 3	SSB
4007.0		UNID teleprinter	300
4009.0		ship stations, ch 4	SSB
4010.0	VJK	RFDS Meekath., WA, AUS	SSB
	VJY	RFDS Darwin, NT, AUS	SSB
	VNZ	RFDS Pt. Augusta, SA, AUS	SSB
4012.0		ship stations, ch 5	SSB
4012.2	5ST	ASECNA Antananarivo, MDG	ARQ-E3 48 Bd: 1349-0253 tfc to 3BZ Plaisance; QSX 4023.5 kHz [TPA]
4013.0		Tuzla Police, BIH	Clover: 1623 msgs + tfc to Sarajevo
4014.0	*ZRO*	*Pretoria Meteo, AFS*	*FAX $*
4015.0		ship stations, ch 6	SSB
4018.0		ship stations, ch 7	SSB
	DEL	BGS München, D	VFT: FEC-A 96 Bd: 1100 encrypted tfc + tfc to DEL 60 Rosenheim, 1113 tfc + encrypted msg to DEL 30
	DEL 30	UNID BGS station, D (1295)	VFT: FEC-A 96 Bd: 1115 tfc to DEL München
	DEL 60	BGS Rosenheim, D	VFT: FEC-A 96 Bd: 1105 tfc to DEL München
	ZRO 5	Pretoria Meteo, AFS	ITA2 75 Bd: 1715-0402 wx
4020.0		many USA MARS stations	SSB
4021.0		ship stations, ch 8	SSB
4022.0		UNID teleprinter	75
4023.5	3BZ	Plaisance Air, MAU	ARQ-E3 48 Bd: 1349+2133-0217 tfc or msgs to 5ST Antananarivo; QSX 4012.2 kHz [PTA]
4024.0		ship stations, ch 9	SSB
		many USA MARS stations	SSB
4027.0		ship stations, ch 10	SSB
4028.0		UNID teleprinter	200
4030.0		ship stations, ch 11	SSB
	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 1720 tfc
	VKL	RFDS Port Hedl., WA, AUS	SSB
4031.0	'P'	Beacon Kaliningrad, RUS	CW
4033.0		ship stations, ch 12	SSB
4035.0		many USA MARS stations	SSB
4036.0		ship stations, ch 13	SSB
4039.0		ship stations, ch 14	SSB
		many NATO st., BIH/HRV	SSB
4041.0		many USN MARS stations	SSB
4042.0		ship stations, ch 15	SSB
	A3A 30	Nuku'alofa, TON	SSB
	A3E	Ha'afeva, TON	SSB
	A3F	Ha'apai, TON	SSB
	A9M 9	GNA Manama, BHR	ITA2 75 Bd: 1500 E nx, 1700 A nx
4043.0	'P'	Beacon Kaliningrad, RUS	CW
4045.0		ship stations, ch 16	SSB
	VJJ	RFDS Charlevl., QLD, AUS	SSB

4045.0	VJN	RFDS Cairns, QLD, AUS	SSB
	VJT	RFDS Carnarvon, WA, AUS	SSB
	YRR 4	Bucharest Meteo, ROU	ITA2 50 Bd: 1723-0316 wx
4048.0		ship stations, ch 17	SSB
4049.0		UNID teleprinter	CIS 10-11-11 MFSK
4051.0		ship stations, ch 18	SSB
4054.0		ship stations, ch 19	SSB
4055.0	VJC	RFDS Bkn. Hill, NSW, AUS	SSB
		UNID teleprinter	200
4056.0		UNID teleprinter	75 200
4057.0		ship stations, ch 20	SSB
4060.0		ship stations, ch 21	SSB
	VVD 55	Delhi Meteo, IND	ITA2 50 Bd: 0212+2004 wx
		UNID teleprinter	CIS 10-11-11 MFSK

4063.0 - 4438.0 MARITIME MOBILE <500A 500B 518 519 520 520A 520B>

4065.0		ship stations, ch 401	SSB QSX 4357.0 kHz
4068.0		ship stations, ch 402	SSB QSX 4360.0 kHz
4071.0		ship stations, ch 403	SSB QSX 4363.0 kHz
4071.9		UNID teleprinter	150
4074.0		ship stations, ch 404	SSB QSX 4366.0 kHz
4077.0		ship stations, ch 405	SSB QSX 4369.0 kHz
4077.7		UNID station (1295)	PACTOR: 1835 .ZIP msgs
4080.0		ship stations, ch 406	SSB QSX 4372.0 kHz
4082.8		UNID station (1295)	PACTOR: 1700 encrypted tfc
4083.0		ship stations, ch 407	SSB QSX 4375.0 kHz
4086.0		ship stations, ch 408	SSB QSX 4378.0 kHz
4089.0		ship stations, ch 409	SSB QSX 4381.0 kHz
4090.0	'HCBSNBA'	UNO Banja Luka, BIH	PACTOR: 1723-2025 tfc or msgs or msgs (compressed .ZIP press files) to 'HCBSNZE' Zenica or 'HCHRVZA' Zagreb
	'HCBSNBI'	UNO Bihac, BIH	PACTOR: 1758+1833+2016 tfc to 'HCHRVZA' Zagreb
	'HCBSNBK'	UNO Bosanski Krupa, BIH	PACTOR: 1759 tfc
	'HCBSNPA'	UNO Pale, BIH	PACTOR: 1648 tfc; 2001 tfc to 'HCHRVZA' Zagreb
	'HCBSNSA'	UNO Sarajevo, BIH	PACTOR: 1646+1656 tfc
	'HCBSNTU'	UNO Tuzla, BIH	PACTOR: 0651 tfc; 1657+1740+1957 tfc to 'HCHRVZA' Zagreb
	'HCBSNZE'	UNO Zenica, BIH	PACTOR: 1735 tfc; 1724 tfc to 'HCBSNBA' Banja Luka, 1938 tfc to 'HCHRVZA' Zagreb
	'HCHRVME'	UNO Metkovic, HRV	PACTOR: 0730+1646 tfc, 1813 tfc to 'HCHRVZA' Zagreb
	'HCHRVSP'	UNO Split, HRV	PACTOR: 1815 tfc to 'HCHRVZA' Zagreb
	'HCHRVZA'	UNO Zagreb, HRV	PACTOR: 1653-2025 tfc or msgs or msg (E REUTER nx) to 'HCBSNBA' Banja Luka or 'HCBSNBI' Bihac or 'HCBSNPA' Pale or 'HCBSNTU' Tuzla or 'HCBSNZE' Zenica or 'HCHRVME' Metkovic or 'HCHRVSP' Split or 'HCSWIGE' Geneva

4090.0	**'HCHZ'**	**UNO Zagreb, HRV**	**SITOR-A: 0646 msg, 1718 msg to 'HCSWIGE' Geneva, 1750 msg, final tfc, s. off**
	'HCSWIGE'	**UNO Geneva, SUI**	**PACTOR: 1722 tfc to 'HCHRVZA' Zagreb** **SITOR-A: 0626 msg (E nx); 1718 tfc to 'HCHRVZA' Zagreb, into ↑↑**
	'HCYT'	**UNO Tuzla, BIH**	**SITOR-A: 1815 msg (E REUTER nx)**
4091.7	**'HCHRVZA'**	**UNO Zagreb, HRV**	**SITOR-A: 1503 msg to 'HCSWIGE' Geneva, 1847 tfc**
	'HCSWIGE'	**UNO Geneva, SUI**	**SITOR-A: 1503 tfc to 'HCHRVZA' Zagreb**
4092.0		ship stations, ch 410	SSB QSX 4384.0 kHz
4095.0		ship stations, ch 411	SSB QSX 4387.0 kHz
4098.0		ship stations, ch 412	SSB QSX 4390.0 kHz
4100.0		**UNID teleprinter**	**75**
4101.0		ship stations, ch 413	SSB QSX 4393.0 kHz
4104.0		ship stations, ch 414	SSB QSX 4396.0 kHz
4107.0		ship stations, ch 415	SSB QSX 4399.0 kHz
4110.0		ship stations, ch 416	SSB QSX 4402.0 kHz
4112.9		**DB27 oil rig, UAE**	**SITOR-A: 1730 msg "from db27 to jebel ali" + final tfc "correct boss have a nice day rajan here" to Jebel Ali**
		Jebel Ali, UAE	**SITOR-A: 1730 tfc to DB27, s. off**
4113.0		ship stations, ch 417	SSB QSX 4405.0 kHz
4114.5		**UNID teleprinter**	**100**
4116.0		ship stations, ch 418	SSB QSX 4408.0 kHz
4119.0		ship stations, ch 419	SSB QSX 4411.0 kHz
4122.0		ship stations, ch 420	SSB QSX 4414.0 kHz
4125.0		ship stations, ch 421 (WORLDWIDE CALLING FREQUENCY) SUPPLEMENTARY WORLDWIDE CALLING/DISTRESS/SAFETY F. COMMON USA COAST AND SHIP STATIONS SIMPLEX FREQUENCY (PEP NOT MORE THAN 30 DBW)	SSB QSX 4417.0 kHz
4128.0		ship stations, ch 422	SSB QSX 4420.0 kHz
4131.0		ship stations, ch 423	SSB QSX 4423.0 kHz
4134.0		ship stations, ch 424	SSB QSX 4426.0 kHz
4137.0		ship stations, ch 425	SSB QSX 4429.0 kHz
4140.0		ship stations, ch 426	SSB QSX 4432.0 kHz
	3BB	Port Louis Harbour R, MAU	SSB
4143.0		ship stations, ch 427	SSB QSX 4435.0 kHz
4144.0	ICA	IN Ancona, I	SSB
4146.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB
4149.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB
4154.5	DHJ 59	GN Wilhelmshaven, D	SSB
	ICE	IN Brindisi, I	SSB
	ICT	IN Taranto, I	SSB
4157.9		**UNID teleprinter**	**150**
4162.0		**UNID teleprinter**	**200**
4168.5	ICH	IN La Maddalena, I	SSB
	IGJ	IN Augusta, I	SSB
		IN Pantelleria, I	SSB
		MA IFOR Gorazde, BIH	SSB
		MA IFOR Mostar, BIH	SSB
4172.5		ship stations, channel 1	QSX 4210.5 kHz
4173.0		ship stations, channel 2	QSX 4211.0 kHz
4173.5		ship stations, channel 3	QSX 4211.5 kHz

4174.0		ship stations, channel 4	QSX 4212.0 kHz
		UNID teleprinter	100
4174.5		ship stations, channel 5	QSX 4212.5 kHz
4175.0		ship stations, channel 6	QSX 4213.0 kHz
4175.5		ship stations, channel 7	QSX 4213.5 kHz
4176.0		ship stations, channel 8	QSX 4214.0 kHz
4176.5		ship stations, channel 9	QSX 4214.5 kHz
4177.0		ship stations, channel 10	QSX 4215.0 kHz
4177.5	WORLDWIDE	NBDPT DISTR. AND SAFETY F.	
4178.0		ship stations, channel 12	QSX 4215.5 kHz
4178.5		ship stations, channel 13	QSX 4216.0 kHz
4179.0		ship stations, channel 14	QSX 4216.5 kHz
4179.5		ship stations, channel 15	QSX 4217.0 kHz
4180.0		ship stations, channel 16	QSX 4217.5 kHz
4180.5		ship stations, channel 17	QSX 4218.0 kHz
4181.0		ship stations, channel 18	QSX 4218.5 kHz
4181.5		ship stations, channel 19	QSX 4219.0 kHz
4182.0		ship stations calling, ch 1	CW group I
4182.5		ship stations calling, ch 2	CW group I
4182.9		UNID teleprinter	150
4183.0		ship stations calling, ch 5	CW group II
4183.5		ship stations calling, ch 6	CW group II
4184.0		ship stations calling, ch 3	CW common channel
4184.5		ship stations calling, ch 4	CW common channel
4185.0		ship stations calling, ch 7	CW group III
4185.5		ship stations calling, ch 8	CW group III
4186.0		ship stations calling, ch 9	CW group IV
4186.5		ship stations calling, ch 10	CW group IV
4187.0 - - 4202.0		ship stations working frequencies	CW
4190.5		ship stations	QSX 4277.0 kHz (UIW)
4202.5		ship stations, channel 1	non-paired
4203.0		ship stations, channel 2	non-paired
4203.5		ship stations, channel 3	non-paired
		ship stations	QSX 4268.6 kHz (SAB 23)
4204.0		ship stations, channel 4	non-paired
4204.5		ship stations, channel 5	non-paired
4205.0		ship stations, channel 6	non-paired
4205.5		ship stations, channel 7	non-paired
4206.0		ship stations, channel 8	non-paired
4206.5		ship stations, channel 9	non-paired
4207.0		ship stations, channel 10	non-paired
4207.5	WORLDWIDE	DSC DISTRESS AND SAFETY F.	
4208.0	WORLDWIDE	SHIP STATIONS DSC FREQUENCY	QSX 4219.5 kHz
4208.5	WORLDWIDE	SHIP STATIONS DSC FREQUENCY	
4209.0	WORLDWIDE	SHIP STATIONS DSC FREQUENCY	
4209.5	WORLDWIDE	NBDPT NAVTEX FREQUENCY	
4210.0	WORLDWIDE	NBDPT MSI FREQUENCY	
4210.5		coast stations, channel 1	QSX 4172.5 kHz
	EAD	Madrid R, E	SITOR-B: 0100+0300+0500+0700+0900+1100+1300+1500+1700+1900+2100+2300 tfc list
	ESA	Tallinn R, EST	SITOR-A: 1836-0631 R tts wtsca CW
	IAR	Rome R, I	SITOR-A: 24 h tts CW
	JFA	*Funabashi F R, J*	*scheduled*
	KFS	San Francisco R, CA, USA	SITOR-B: 0545+0645 tfc list
	UHS	*Murmansk R, RUS*	*scheduled*

4210.5	*VCT*	*Tors Cove R, NFLD, CAN*	*scheduled*
	WNU	Slidell R, LA, USA	SITOR-B: 0600 schedule, 0900 tfc list
	9GX	*Tema R, GHA*	*scheduled*
	9VG 74	*Singapore R, SNG*	*scheduled*
4211.0		coast stations, channel 2	QSX 4173.0 kHz
	CUL	*Lisbon R, POR*	*scheduled*
	GKE 2	Portishead R, G	SITOR-A: 24 h tts SITOR-B: 0700 + 0800 tfc list, 0930 wx, 1900 tfc list, 2130 wx CW
	JYO	*Aqaba R, JOR*	*scheduled*
	OXZ	*Lyngby R, DNK*	*scheduled*
	WNU	*Slidell R, LA, USA*	*scheduled*
	ZLA	Awanui R, NZL	SITOR-A: 0730 tts CW
	7TK 20	*Boufarik R, ALG*	*scheduled*
4211.5		coast stations, channel 3	QSX 4173.5 kHz
	KFS	San Francisco R, CA, USA	SITOR-A: 0730 + 1339 + 1525 tts SITOR-B: 0730 tfc list CW
	LGW 2	Rogaland R, NOR	SITOR-A: 24 h tts CW
	SPA 21	*Gdynia R, POL*	*scheduled*
	UFL	*Vladivostok R, SE, RUS*	*scheduled*
	USU	Mariupol R, UKR	SITOR-A: 1643-0450 R tts wtsca CW
	XSV	*Tianjin R, CHN*	*scheduled*
	YLQ	*Riga R, LVA*	*scheduled*
	ZSD	*Durban R, AFS*	*scheduled*
4212.0		coast stations, channel 4	QSX 4174.0 kHz
	IAR	*Rome R, I*	*scheduled*
	LSD 836	*Buenos Aires R, ARG*	*scheduled*
	NMN	*USCG Portsm., VA, USA*	*scheduled*
	UCE	*Arkhangelsk R, RUS*	*scheduled*
	UGH	Provideniya R, FE, RUS	ITA2 50 Bd: 0910 R tfc list wtsca SITOR-A: 1130 R tts wtsca
	UQB	*Kholmsk R, FE, RUS*	*scheduled*
	WLC	Rogers City R, MI, USA	SITOR-B: 1330 + 1630 wx
	XSQ	Guangzhou R, CHN	SITOR-A: 1207 + 1440 + 1917 + 2258 tts SITOR-B: 1330 tfc list CW
	ZLA	*Awanui R, NZL*	*scheduled*
	3AC 14	*Monte Carlo R, MCO*	*scheduled*
	9WH 20	*K. Kinabalu R, Sb., MLA*	*scheduled*
4212.5		coast stations, channel 5	QSX 4174.5 kHz
	A7D	*Doha R, QAT*	*scheduled*
	D4A	*Mindelo R, S. Vicente, CPV*	*scheduled*
	FFT 21	Saint Lys R, F	SITOR-A: 24 h tts SITOR-B: 0200 + 0700 + 0800 + 0900 + 1000 + 1100 + 1300 + 1900 + 2200 tfc list CW
	HZG	*Dammam R, ARS*	*scheduled*
	LZW 23	*Varna R, BUL*	*scheduled*
	SPB 21	*Szczecin R, POL*	*scheduled*
	UBE	*Petropavl.-Km. R, FE, RUS*	*scheduled*

4212.5	WOO	Ocean Gate R, NJ, USA	SITOR-B: 24 h tfc list; 0020+0220+0420+0620+0820+1020+1220+1420+1620+1820+2020+2220 wx
	XSG	*Shanghai R, CHN*	*scheduled*
	ZHH	*Jamestown R, SHN*	*scheduled*
4213.0		coast stations, channel 6	QSX 4175.0 kHz
	LGW 3	Rogaland R, NOR	SITOR-A: 24 h tts SITOR-B: 2000 tfc list CW
	SVS 2	*Athens R, GRC*	*scheduled*
	VIP 31	Perth R, WA, AUS	SITOR-A: 1917+2136 tts CW
	WLO	Mobile R, AL, USA	SITOR-A: 0632 tts CW
4213.5		coast stations, channel 7	QSX 4175.5 kHz
	CNP	*Casablanca R, MRC*	*scheduled*
	EAD	Madrid R, E	SITOR-B: 0100+0300+0500+0700+0900+1100+1300+1500+1700+1900+2100+2300 tfc list
	GKL 2	*Portishead R, G*	*scheduled*
	JFA	*Funabashi F R, J*	*scheduled*
	KEJ	Hoolehua R, HWA	SITOR-A: 1025 tts SITOR-B: H+15 tfc list CW
	NOJ	USCG Kodiak, ALS	SITOR-A: 0750+1340+1440 tts CW
	SPA 22	Gdynia R, POL	SITOR-A: 0046 tts SITOR-B: 2050 tfc list CW
	UFN	Novorossiysk R, RUS	ITA2 50 Bd: 1959-0634 R tts wtsca CW
	WAH	*Saint Thomas R, VIR*	*scheduled*
	XSG	*Shanghai R, CHN*	*scheduled*
	9AR	*Rijeka R, HRV*	*scheduled*
	9WW 20	*Kuching R, Sarawak, MLA*	*scheduled*
4214.0		coast stations, channel 8	QSX 4176.0 kHz
	FFT 22	*Saint Lys R, F*	*scheduled*
	GKP 2	*Portishead R, G*	*scheduled*
	HPP	*Panama R, PNR*	*scheduled*
	IDR 2	IN Rome, I	ITA2 75 Bd: 1516 channel status CW
	KLB	*Seattle R, WA, USA*	*scheduled*
	ZSC 61	Cape Town R, AFS	SITOR-B: 0015+0215+0415 tfc list; 0615 tfc list, navigational warnings; 0815 tfc list, 0900 navigational warnings, 0930 wx, 1015+1215+1415+1615 tfc list, 1700 navigational warnings, 1730 wx, 1815+2015+2215 tfc list
	9AR	*Rijeka R, HRV*	*scheduled*
	9WH 20	*K. Kinabalu R, Sb., MLA*	*scheduled*
4214.5		coast stations, channel 9	QSX 4176.5 kHz
	CBV	Valparaiso R, CHL	SITOR-A: 0745 tts CW
	KEJ	*Hoolehua R, HWA*	*scheduled*
	SAB 209	Goeteborg R, S	SITOR-A: 24 h tts

4214.5	*SVS 2*	*Athens R, GRC*	*scheduled*
	UTQ	*Kiyev R, UKR*	*scheduled*
	VAI	CCG Vancouver, BC, CAN	SITOR-B: 0230 + 0730 wx
	9AR	*Rijeka R, HRV*	*scheduled*
	9MG 13	*Georgetown R, P. I., MLA*	*scheduled*
	9VG 75	*Singapore R, SNG*	*scheduled*
4215.0		coast stations, channel 10	QSX 4177.0 kHz
	D4A	*Mindelo R, S. Vicente, CPV*	*scheduled*
	IAR	*Rome R, I*	*scheduled*
	JOS	*Nagasaki R, J*	*scheduled*
	OFA	*Helsinki R, FIN*	*scheduled*
	WLO	Mobile R, AL, USA	SITOR-A: 0235-0740 tts CW
	7TK 21	*Boufarik R, ALG*	*scheduled*
	9WW 20	*Kuching R, Sarawak, MLA*	*scheduled*
4215.5		coast stations, channel 12	QSX 4178.0 kHz
	HEC 24	Berne R, SUI	SITOR-A: 24 h tts SITOR-B: 1430 tfc list CW
	HPP	*Panama R, PNR*	*scheduled*
	NMF	*USCG Boston, MA, USA*	*scheduled*
	OXZ	Lyngby R, DNK	SITOR-A: 24 h tts SITOR-B: 0130 + 0330 + 0530 + 0730 + 0930 + 1130 + 1330 + 1530 + 1730 + 1930 + 2130 + 2330 tfc list CW
4216.0		coast stations, channel 13	QSX 4178.5 kHz
	A7D	Doha R, QAT	SITOR-A: 1800 + 1924 tts CW
	CNP	*Casablanca R, MRC*	*scheduled*
	EQJ	*Chah Bahar R, IRN*	*scheduled*
	GKY 2	*Portishead R, G*	*scheduled*
	KPH	San Francisco R, CA, USA	SITOR-A: 0342 + 0639 + 0955 + 1340 + 1441 tts SITOR-B: 0100 + 0300 tfc list; 0500 tfc list, wx; 0700 + 0900 + 1100 + 1300 + 1500 + 1700 tfc list; 1900 tfc list, wx; 2100 + 2300 tfc list CW
	SVU 2	*Athens R, GRC*	*scheduled*
	TAH	*Istanbul R, TUR*	*scheduled*
	WCC	*Chatham R, MA, USA*	*scheduled*
	3AC 24	*Monte Carlo R, MCO*	*scheduled*
	9MG 13	*Georgetown R, P. I., MLA*	*scheduled*
4216.5		coast stations, channel 14	QSX 4179.0 kHz
	GKQ 2	*Portishead R, G*	*scheduled*
	IAR	Rome R, I	SITOR-A: 24 h tts CW
	JNA	*JN Tokyo, J*	*scheduled*
	KPH	*San Francisco R, CA, USA*	*scheduled*
	LSD 836	*Buenos Aires R, ARG*	*scheduled*
	SAB 214	Goeteborg R, S	SITOR-A: 24 h tts
	UUI	*Odessa R, UKR*	*scheduled*

4216.5	WCC	Chatham R, MA, USA	SITOR-A: 0259+0311+0550 tts SITOR-B: 0040+0240 tfc list; 0440 tfc list, wx; 0640+0840+1040 tfc list; 1240 tfc list, wx; 1440 tfc list; 1640 tfc list, wx; 1840+2040+2240 tfc list CW
	YLQ	*Riga R, LVA*	*scheduled*
4217.0		coast stations, channel 15	QSX 4179.5 kHz
	PCH 26	Scheveningen R, NLD	SITOR-A: 24 h tts SITOR-B: 0115+0315+0515+0715+0915+1115+1315+1515+1715+1915+2115+2315 tfc list CW
	SPB 22	*Szczecin R, POL*	*scheduled*
	WLO	Mobile R, AL, USA	SITOR-A: 0050+0636 tts CW
4217.5		coast stations, channel 16	QSX 4180.0 kHz
	KMI	*Dixon R, CA, USA*	*scheduled*
	VCT	Tors Cove R, NFLD, CAN	SITOR-A: 0050+0248+0328 tts SITOR-B: 0451+1051+1651+2251 wx CW
4218.0		coast stations, channel 17	QSX 4180.5 kHz
	EQN	*Khomeini R, IRN*	*scheduled*
	LPD	General Pacheco R, ARG	SITOR-A: 0745 tts CW
	OST	Oostende R, BEL	SITOR-A: 24 h tts CW
	WLO	*Mobile R, AL, USA*	*scheduled*
	4PB	*Colombo R, SLK*	*scheduled*
4218.5		coast stations, channel 18	QSX 4181.0 kHz
	LSD 836	*Buenos Aires R, ARG*	*scheduled*
	LZW 24	Varna R, BUL	SITOR-A: 2227 tts CW
	SAB 218	Goeteborg R, S	SITOR-A: 0330+2110+2227 tts SITOR-B: 1335 schedule, tfc list
	YLQ	Riga R, LVA	SITOR-A: 24 h R tts wtsca CW
4219.0		coast stations, channel 19	QSX 4181.5 kHz
	LPD	*General Pacheco R, ARG*	*scheduled*
	TAH	*Istanbul R, TUR*	*scheduled*
	4PB	*Colombo R, SLK*	*scheduled*
4219.5	WORLDWIDE	COAST STATIONS DSC FREQUENCY	QSX 4208.0 kHz
4220.0	WORLDWIDE	COAST STATIONS DSC FREQUENCY	
4220.5	WORLDWIDE	COAST STATIONS DSC FREQUENCY	
4221.0	GYU	RN Gibraltar, GIB	ITA2 75 Bd: 1938+2226 channel status
4222.0	XSN	Ningbo R, CHN	CW
		UNID teleprinter	ITA2 75 encrypted
4223.0	SVD 2	Athens R, GRC	CW
	UCW	Saint Petersburg R, RUS	CW
4223.5	9HD	Valetta R, MLT	CW
4225.0	JCT	Choshi R, J	CW
	XFM	Manzanillo R, MEX	CW
	XFN	Progreso R, MEX	CW
4226.5	STP	Port Sudan R, SDN	CW
4227.0	IGJ 42	IN Augusta, I	ITA2 100 Bd: 1200-0330 channel status

4228.0	*CBV*	*Valparaiso R, CHL*	*FAX 120/576: 2300+2330 charts*
	KFS	San Francisco R, CA, USA	CW
	SXA 3	GN Piraeus, GRC	CW
	UIW	Kaliningrad R, RUS	CW
	XSP	Shantou R, CHN	CW
	9MG 6	Georgetown R, Pin. I., MLA	CW
4229.0	LYK	Klaipeda R, LTU	CW
4230.0	**PBC**	**DN Goeree Island, NLD**	**ITA2 75 Bd: 24 h encrypted tfc**
	UUI	Odessa R, UKR	CW
	4WD	Al Hudaydah R, YEM	CW
4231.0	A7D	Doha R, QAT	CW
	PPJ	Juncao R, B	CW
	S3E	Khulna R, BGD	CW
4231.5	UVA	Gelendhzik R, RUS	CW
4232.0	**FUF**	**FN Fort de France, MRT**	**ITA2 75 Bd: 0040-1000 ry**
4232.5	VRX	Victoria Harbour R, HKG	CW
	5RS	Toamasina R, MDG	CW
4233.0	A4M	Muscat R, OMA	CW
4235.0	HLP	Pusan R, KOR	CW
	VAI	CCG Vancouver, BC, CAN	CW
4235.5	EDF	Madrid R, E	CW
4236.0	YLQ	Riga R, LVA	CW
4236.5	VFF	CCG Iqaluit, NWT, CAN	CW
4237.0	HCG	Guayaquil R, EQA	CW
	PPO	Olinda R, B	CW
4238.0	PKG	Banjarmasin R, INS	CW
	VTP 4	IN Vishakhapatnam, IND	CW
	WCC	Chatham R, MA, USA	CW
4239.0	9MB 2	MN Georgetown, P.I., MLA	CW
		UNID teleprinter	**75**
4239.4	SVB 2	Athens R, GRC	CW
4239.5	L2E	ACG Buenos Aires, ARG	CW
	L2Z	ACG Com. Rivadavia, ARG	CW
4240.0	ELH	Harbel R, LBR	CW
	ESP	Pärnu R, EST	CW
	JYO	Aqaba R, JOR	CW
	RPLT	Tuapse R, RUS	CW
	XSE	Qinhuangdao R, CHN	CW
4241.0	UFZ	Vladivostok R, SE, RUS	CW
	4XZ	IN Haifa, ISR	CW
4241.5	LGW	Rogaland R, NOR	CW
4243.0	UVD	Magadan R, FE, RUS	CW
4244.0	PPR	Rio de Janeiro R, B	CW
	XSK	Beihai R, CHN	CW
	3CA 4	Bata R, GNE	CW
4245.0	UAD	Kholmsk R, FE, RUS	CW
	UFN	**Novorossiysk R, RUS**	**ITA2 50 Bd: 1340 R tts wtsca, 1836 ry, 1845+1857 R tts wtsca** CW
4246.0		**UNID teleprinter**	**ITA2 75 encrypted**
4247.0	KPH	San Francisco R, CA, USA	CW
	MTI	**RN Plymouth, G**	**ITA2 75 Bd: 0958+1755-0332 channel status**
	OBC	Callao R, PRU	CW
	P2M	Port Moresby R, PNG	CW
	4PB	Colombo R, SLK	CW
4247.5	PPL	Belem R, B	CW
	PPR	Rio de Janeiro R, B	CW
4250.0	ASK	Karachi R, PAK	CW
	PCH 20	Scheveningen R, NLD	CW

4250.0	**WLO**	**Mobile R, AL, USA**	**SITOR-B: H+35 tfc list, wx**
	XFL	Mazatlan R, MEX	CW
	ZLP 2	RNZN Auckland, NZL	CW
4251.0	PPJ	Juncao R, B	CW
4251.5	GKC 2	Portishead R, G	CW
4252.0	7TF 2	Boufarik R, ALG	CW
4253.0	TAH	Istanbul R, TUR	CW
	UCE	**Arkhangelsk R, RUS**	**ITA2 50 Bd: 1718-2155 R tts wtsca** CW
	XSZ	Dalian R, CHN	CW
4253.5	HZG	Dammam R, ARS	CW
4254.0	9WH 20	K. Kinabalu R, Sb., MLA	CW
4255.0	SUZ 3	Serapeum R, EGY	CW
4255.3	PZN 25	Paramaribo R, SUR	CW
4256.0	CBV	Valparaiso R, CHL	CW
	GKD 2	Portishead R, G	CW
		UNID teleprinter	75
4257.5	WLO	Mobile R, AL, USA	CW
4258.3	**GYA**	**RN London, G**	**ITA2 75 Bd: 1123+2023+2156 channel status**
	MGJ	**RN Faslane, G**	**ITA2 75 Bd: 2012 channel status**
4260.0	OBF	Mollendo R, PRU	CW
	TBA 2	TN Ankara, TUR	CW
	UDK	Murmansk R, RUS	CW
	XSL 22	Fangcheng R, CHN	CW
4261.0	EBA	SN Madrid, E	CW
4262.0	DZW	Manila R, PHL	CW
	EQL	Anzali R, IRN	CW
	EQO	Nowshahr R, IRN	CW
	J2A 4	Jibuti R, DJI	CW
	LPD 62	General Pacheco R, ARG	CW
	LZL 2	Bourgas R, BUL	CW
4263.5	ZLO 2	RNZN Auckland, NZL	CW
4265.0	CBV	Valparaiso R, CHL	CW
	PPL	Belem R, B	CW
	USU	**Mariupol R, UKR**	**ITA2 50 Bd: 1500 R navigational warnings wtsca** CW
4266.0	RUF	Sevastopol' R, UKR	CW
	XSR	Haikou R, CHN	CW
4267.9	GKG 2	Portishead R, G	CW
4268.0	**CKN**	**CF Victoria, BC, CAN**	**ITA2 75 Bd: 0730 wx** *FAX // 2754.0 kHz $*
	DZE	Mandaluyong R, PHL	CW
	LPD 68	General Pacheco R, ARG	CW
	VTG 4	IN Mumbai, IND	CW
	WCC	Chatham R, MA, USA	CW
	XFC	Cozumel R, MEX	CW
	XFK	La Paz R, MEX	CW
	XFQ	Salina Cruz R, MEX	CW
4268.6	**SAB 23**	**Goeteborg R, S**	**SITOR-A: 24 h tts; QSX 4203.5 kHz** **SITOR-B: 1700 Swedish nx**
4269.5	EDZ	Madrid R, E	CW
4270.0		UNID teleprinter	200
4271.0	**CFH**	**CF Halifax, NS, CAN**	**ITA2 75 Bd: 2200-1343 wx** *FAX // 122.5 kHz $*
	FUJ	**FN Noumea, NCL**	**ITA2 75 Bd: 0450-1725 ry**
	OFJ 4	Helsinki R, FIN	CW

4271.0	UBE	Petropavl.-Km. R, FE, RUS	CW
	XFY	Guaymas R, MEX	CW
	XSB 48	Dandong R, CHN	CW
	XSG	Shanghai R, CHN	CW
4272.0	SPH 22	Gdynia R, POL	CW
4274.0	DZF	Bacoor R, PHL	CW
	GKB 2	Portishead R, G	CW
	KFS	San Francisco R, CA, USA	CW
	XSU	Yantai R, CHN	CW
4275.0	HPP	Panama R, PNR	CW
	SAA	Karlskrona R, S	CW
	TBA 5	TN Ankara, TUR	CW
4276.0	JNA	JN Tokyo, J	CW
4277.0	HKB	Barranquilla R, CLM	CW
	UIW	**Kaliningrad R, RUS**	**ITA2 50 Bd: 1033-2247 R tts wtsca; QSX 4190.5 kHz**
			CW
	UON	Baku R, AZE	CW
	USO	Izmail R, UKR	CW
4278.0	DZP	Novaliches R, PHL	CW
	HZG	Dammam R, ARS	CW
	XSH	Basuo R, CHN	CW
4279.0		**UNID teleprinter**	**ITA2 100 encrypted**
4280.0	IDQ	IN Rome, I	CW
	PBC 34	**DN Goeree Island, NLD**	**ITA2 75 Bd: 24 h ry**
	PPO	Olinda R, B	CW
4282.0	EQN	Khomeini R, IRN	CW
	LZL 2	Bourgas R, BUL	CW
	3BM 3	Port Louis R, MAU	CW
4282.3	7TF 2	Boufarik R, ALG	CW
4282.9		**UNID teleprinter**	**150**
4283.0	RTEU	Aleksandrov-S. R, FE, RUS	CW
	S9M	Sao Tome R, STP	CW
	UKW	Korsakov R, FE, RUS	CW
	VTF 2	IN Mumbai, IND	CW
	VTO 2	IN Vishakhapatnam, IND	CW
	XSV	Tianjin R, CHN	CW
4284.0	A9M	Hamala R, BHR	CW
4285.0	ESA	Tallinn R, EST	CW
	UFL	Vladivostok R, SE, RUS	CW
	XFU	Veracruz R, MEX	CW
4286.0	GKA 2	Portishead R, G	CW
	VIX 2	RAN Canberra, ACT, AUS	CW
	VWC	Calcutta R, IND	CW
		UNID teleprinter	**81**
4286.4	ZAC	Shengjin R, ALB	CW
	ZAD 2	Durres R, ALB	CW
	ZAS	Sarande R, ALB	CW
	ZAV	Vlore R, ALB	CW
4286.9	5RS	Toamasina R, MDG	CW
4287.0	FJY 4	Martin de Vivies R, AMS	CW
4288.0	DZZ	Manila R, PHL	CW
	XSQ	Guangzhou R, CHN	CW
	7TF 2	Boufarik R, ALG	CW
4288.6		**UNID teleprinter**	**100**
4289.0	C9L 2	Maputo R, MOZ	CW
	C9L 6	Mozambique R, MOZ	CW
4290.0	DZO	Bulacan R, PHL	CW
	UFJ	Rostov-na-Donu R, RUS	CW
	XSG	Shanghai R, CHN	CW

4291.0	OBY	Paita R, PRU	CW
	ZSC 46	Cape Town R, AFS	CW
4292.0	D4A	Mindelo R, S. Vicente, CPV	CW
	D4D	Praia R, Santiago, CPV	CW
	IAR	Rome R, I	CW
	VFA	CCG Inuvik, NWT, CAN	CW
	XFA	Acapulco R, MEX	CW
	XFP	Chetumal R, MEX	CW
	XYR 6	Yangon R, MYA	CW
4293.0	XSO	Wenzhou R, CHN	CW
4294.0	9WW 20	Kuching R, Sarawak, MLA	CW
4295.0	**HWN**	**FN Paris, F**	**ITA2 75 Bd: 2011-0830 ry**
	PKB	Belawan R, INS	CW
	PKC	Palembang R, INS	CW
	PKE	Amboina R, INS	CW
	PKF	Ujung Pandang R, INS	CW
	SXA 34	GN Piraeus, GRC	CW
	UHK	Batumi R, GEO	CW
	XSJ	Zhanjiang R, CHN	CW
	6VA 3	Dakar R, SEN	CW
4295.5	ROD	Murmansk R, RUS	CW
4298.0	FJA 41	Mahina R, Tahiti, OCE	CW
	JMC 2	Tokyo Meteo, J	CW
	NOJ	*USCG Kodiak, ALS*	*FAX $*
	PPO	Olinda R, B	CW
4299.0	9KK 2	Safat R, KWT	CW
4300.0	KEJ	Hoolehua R, HWA	SITOR-A: 1300 tts SITOR-B: 0615+0815+1300 tfc list CW
	RSGV	Petrozavodsk R, RUS	CW
4301.0	CBV	Valparaiso R, CHL	CW
	VWM	Madras R, IND	CW
	ZPK	Asuncion R, PRG	CW
4302.0	A9M	Hamala R, BHR	CW
4303.0	OXZ	Lyngby R, DNK	CW
4304.0	L2C	ACG Buenos Aires, ARG	CW
	L2W	ACG Com. Rivadavia, ARG	CW
	9AR	Rijeka R, HRV	CW
4305.0	UIB	Magadan R, FE, RUS	CW
	XSZ	Dalian R, CHN	CW
4305.5	JNA	JN Tokyo, J	CW
4306.0	SPE 21	Szczecin R, POL	SITOR-B: 1757 schedule, 1800 tfc list, 2157 schedule, 2200 tfc list CW
4307.0	*GYA*	*RN London, G*	*FAX // 3652.0 kHz $*
	UHS	Murmansk R, RUS	CW
	UON	Baku R, AZE	CW
	ZPK	Asuncion R, PRG	CW
4307.5	XFB	Ciudad del Carmen R, MEX	CW
	XFE	Ensenada R, MEX	CW
4308.0	HLG	Soul R, KOR	CW
4309.0	HZG	Dammam R, ARS	CW
	7TF 2	Boufarik R, ALG	CW
4309.2	XSK 4	Haimen R, CHN	CW
4310.0	DYP	Cebu R, PHL	CW
	XSI	Sanya R, CHN	CW
4311.0	PPL	Belem R, B	CW
4312.0	PPJ	Juncao R, B	CW
4313.0	9VG 33	Singapore R, SNG	CW

4314.0	LZW 2	Varna R, BUL	CW
	XSM	Xiamen R, CHN	CW
4314.5	GKH 2	Portishead R, G	CW
4315.0	**UGC**	**Saint Petersburg R, RUS**	**ITA2 50 Bd: 2021 R tts wtsca** CW
4315.5	A3A	Nuku'alofa R, TON	CW
4316.0	A7D	Doha R, QAT	CW
	DYV	Iloilo R, PHL	CW
	GKM 2	Portishead R, G	CW
	JJC	*KYODO Tokyo, J*	*FAX $*
	NMG	*USCG N. Orleans, LA, USA*	*FAX $*
	VHI 2	RAN Darwin, NT, AUS	CW
	VWB	Mumbai R, IND	CW
	WSC	Tuckerton R, NJ, USA	CW
4317.0	ZSC 33	Cape Town R, AFS	CW
4317.5	GKI 2	Portishead R, G	CW
4318.0	DZU	Pasig R, PHL	CW
4319.0	SPH 23	Gdynia R, POL	CW
	XSG	Shanghai R, CHN	CW
4320.0	IAR	Rome R, I	CW
	UNI	Ventspils R, LVA	CW
4320.9		**UNID teleprinter**	**100**
4321.0	PPJ	Juncao R, B	CW
	PPL	Belem R, B	CW
	PPO	Olinda R, B	CW
4322.0	**MGJ**	**RN Faslane, G**	**ITA2 75 Bd: 0335 + 0925 + 1701 + 2116 + 2223 channel status**
	9VG 54	Singapore R, SNG	CW
4323.5	YQI 2	Constanta R, ROU	CW
4323.6	ELZ	Cape Palmas R, LBR	CW
4324.0	DZH	Manila R, PHL	CW
4325.0	AQP 3	PN Karachi, PAK	CW
	HKC	Buenaventura R, CLM	CW
	OBQ	Iquitos R, PRU	CW
	SUP	Port Said R, EGY	CW
	9WW 20	Kuching R, Sarawak, MLA	CW
4326.0	XSF	Lianyungang R, CHN	CW
4326.5	GKJ 2	Portishead R, G	CW
4328.0	FFL 2	Saint Lys R, F	CW
	JOS	Nagasaki R, J	CW
	ZPK	Asuncion R, PRG	CW
4329.0	PPO	Olinda R, B	CW
4330.0	DZJ	Bulacan R, PHL	CW
	UCE	Arkhangelsk R, RUS	CW
	UUI	Odessa R, UKR	CW
	XSM 4	Quanzhou R, CHN	CW
4331.0	SPE 22	Szczecin R, POL	CW
	WCC	Chatham R, MA, USA	CW
	XSA 2	Nanjing R, CHN	CW
	4XZ	IN Haifa, ISR	CW
	9AR	Rijeka R, HRV	CW
4332.0	**PBC**	**DN Goeree Island, NLD**	**ITA2 75 Bd: 24 h encrypted tfc**
4332.5	JCK	Kobe R, J	CW
4333.0	PPR	Rio de Janeiro R, B	CW
4334.0	VFR	CCG Resolute, NWT, CAN	CW
	XST	Qingdao R, CHN	CW
4335.0	PPJ	Juncao R, B	CW
	UNI	Ventspils R, LVA	CW

4335.0	**YLQ**	**Riga R, LVA**	**ITA2 50 Bd: 1125+1930 R tts wtsca**
			CW
4336.0	DZI	Bacoor R, PHL	CW
	GKK 2	Portishead R, G	CW
		Prague Meteo, CZE	**ITA2 50 Bd: 0336-1912 wx**
4336.5	**'RBSL'**	**IN Mumbai, IND**	**ITA2 50 Bd: 2115+2252 ry**
4337.0	CBV	Valparaiso R, CHL	CW
	SPH 21	Gdynia R, POL	CW
	ZPK	Asuncion R, PRG	CW
	3CA 5	Malabo R, GNE	CW
	9MG 6	Georgetown R, Pin. I., MLA	CW
4338.0	XSW	Kao-hsiung R, TAI	CW
		UNID teleprinter	**50**
4338.5	HPP	Panama R, PNR	CW
4340.0	XSQ	Guangzhou R, CHN	CW
4341.0	PPR	Rio de Janeiro R, B	CW
4341.6	7TF 2	Boufarik R, ALG	CW
4342.0	IRM	CIRM Rome, I	CW
	LZL 2	Bourgas R, BUL	CW
	XUK 4	Kompong Som Ville R, CBG	CW
4342.5	RKLM	Arkhangelsk R, RUS	CW
4343.0	SVA 2	Athens R, GRC	CW
	TUA 3	Abidjan R, CTI	CW
	WLO	**Mobile R, AL, USA**	**SITOR-B: H+35 tfc list, wx**
			CW
	XSD	Yingkou R, CHN	CW
	XSL	Fuzhou R, CHN	CW
	YJM 4	Port-Vila R, Efate I., VUT	CW
4344.0	PPR	Rio de Janeiro R, B	CW
4345.0	UFM	Nevelsk R, FE, RUS	CW
4346.0	CWA	Cerrito R, URG	CW
	NMC	*USCG San Franc., CA, USA*	*FAX $*
	9AR	Rijeka R, HRV	CW
4347.5	5BA	Nicosia R, CYP	CW
4347.9	SUH 6	Alexandria R, EGY	CW
4348.5	HSA 23	Bangkok R, THA	CW
	KLB	Seattle R, WA, USA	CW
4349.0	CBV	Valparaiso R, CHL	CW
	EAD	Madrid R, E	CW
	EQM	Bushire R, IRN	CW
	JCS	Choshi R, J	CW
	S7Q	Victoria R, Mahe, SEY	CW
		UNID teleprinter	**74**
4349.4	HSA 23	Bangkok R, THA	CW
4350.0	TBB 5	TN Ankara, TUR	CW
4350.4	LZW 27	Varna R, BUL	CW
	ZAD 2	Durres R, ALB	CW
4351.0		coast stations, ch 428	SSB
	LZR	Ruse R, BUL	
	L2N	ACG Bahia Blanca, ARG	
	L3A	ACG Com. Rivadavia, ARG	
	WLO	Mobile R, AL, USA	
	XSZ	Dalian R, CHN	
4352.4		**UNID teleprinter**	**100**
4354.0		coast stations, ch 429	SSB
	HKB	Barranquilla R, CLM	
	HKC	Buenaventura R, CLM	
	IAR	Rome R, I	
	JNA	JN Tokyo, J	

4354.0	L2N	ACG Bahia Blanca, ARG		
	L2T	ACG Mar del Plata, ARG		
	PPC	Itajai R, B		
	UAT	Moscow R, RUS		
	VZX	Penta R, Gosf., NSW, AUS		
4355.5		**UNID teleprinter**	**75**	
4357.0		coast stations, ch 401	SSB	QSX 4065.0 kHz
	CWF	Punta Carretas R, URG		
	HLS	Soul R, KOR		
	HPP 20	Panama R, PNR		
	KMI	Dixon R, CA, USA		
	OXZ	Lyngby R, DNK		
	PKN	Balikpapan R, INS		
	PKP	Dumai R, INS		
	PNK	Jayapura R, INS		
	SAG	Goeteborg R, S		
	TAN	Izmir R, TUR		
	TAO	Trabzon R, TUR		
	UCZ	Provideniya R, FE, RUS		
	UFA	Batumi R, GEO		
	UGE	Arkhangelsk R, RUS		
	UIK	Vladivostok R, SE, RUS		
	V5W 21	Walvis Bay R, NMB		
	YLQ	Riga R, LVA		
	ZPA	Asuncion R, PRG		
	5WA	Apia R, SMO		
	9PA	Banana R, ZAI		
4358.9		**UNID station (1295)**	**ITA2 50 Bd: 1048 msg (5lgs)**	
4360.0		coast stations, ch 402	SSB	QSX 4068.0 kHz
	EQJ	Chah Bahar R, IRN		
	GNI	Niton R, G		
	IAR	Rome R, I		
	LSD 836	Buenos Aires R, ARG		
	SPC 23	Gdynia R, POL		
	S3D	Chittagong R, BGD		
	VCT	Tors Cove R, NFLD, CAN		
	XSG	Shanghai R, CHN		
	ZAD	Durres R, ALB		
	5RO	Mahajanga R, MDG		
		Antalaha R, MDG		
		Manakara Sud R, MDG		
4363.0		coast stations, ch 403	SSB	QSX 4071.0 kHz
	E3C	Assab R, ERI		
	LGN 3	Rogaland R, NOR		
	LPX	Comodoro Rivadavia R, ARG		
	OBC	Callao R, PRU		
	VFA	CCG Inuvik, NWT, CAN		
	WOM	Miami R, FL, USA		
	XFA	Acapulco R, MEX		
	XFC	Cozumel R, MEX		
	ZSQ 22	Port Elizabeth R, AFS		
	3AC 4	Monte Carlo R, MCO		
	4PB	Colombo R, SLK		
	5VA 8	Lome R, TGO		
	9WW 20	Kuching R, Sarawak, MLA		
4365.0	*RPJ 78*	*Tashkent Meteo, UZB*	*FAX // 3690.0 kHz $*	
4366.0		coast stations, ch 404	SSB	QSX 4074.0 kHz
	A4M	Muscat R, OMA		
	FFL 21	Saint Lys R, F		
	FJP 4	Noumea R, NCL		

4366.0	KGN	Delcambre R, LA, USA		
	PPC	Itajai R, B		
	PPJ	Juncao R, B		
	PPL	Belem R, B		
	PPM	Manaus R, B		
	PPO	Olinda R, B		
	PPR	Rio de Janeiro R, B		
	PPT	Santarem R, B		
	SPO 22	Szczecin R, POL		
	S3D	Chittagong R, BGD		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	XFB	Ciudad del Carmen R, MEX		
	XFK	La Paz R, MEX		
	XFM	Manzanillo R, MEX		
	XFN	Progreso R, MEX		
	XFP	Chetumal R, MEX		
	XFQ	Salina Cruz R, MEX		
	XFY	Guaymas R, MEX		
	XSQ	Guangzhou R, CHN		
	4XO	Haifa R, ISR		
	6VA	Dakar R, SEN		
		Abidjan F R, CTI		
4369.0		coast stations, ch 405	SSB	QSX 4077.0 kHz
	C5G	Banjul R, GMB		
	EQM	Bushire R, IRN		
	FFL 23	Saint Lys R, F		
	LYK	Klaipeda R, LTU		
	PCG 21	Scheveningen R, NLD		
	PPC	Itajai R, B		
	PPL	Belem R, B		
	PPM	Manaus R, B		
	PPO	Olinda R, B		
	PPR	Rio de Janeiro R, B		
	UBE	Petropavl.-Km. R, FE, RUS		
	UBJ	Baku R, AZE		
	UDN	Novorossiysk R, RUS		
	UFO	Kholmsk R, FE, RUS		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	WLC	Rogers City R, MI, USA		
	WLO	Mobile R, AL, USA		
	XSG	Shanghai R, CHN		
	XSL	Fuzhou R, CHN		
	ZSC 25	Cape Town R, AFS		
	6YI	Kingston R, JMC		
	9VG 60	Singapore R, SNG		
4372.0		coast stations, ch 406	SSB	QSX 4080.0 kHz
	EHY	Madrid R, E		
	GKT 26	Portishead R, G		
	HKB	Barranquilla R, CLM		
	HKC	Buenaventura R, CLM		

4372.0	HZG	Dammam R, ARS		
	LPX	Com. Rivadavia R, ARG		
	SPC 22	Gdynia R, POL		
	TFA	Reykjavik R, ISL		
	TFT	Hornafjoerdur R, ISL		
	XSV	Tianjin R, CHN		
	ZAV	Vlore R, ALB		
	3DP	Suva R, FJI		
	4PB	Colombo R, SLK		
	5BA 22	Nicosia R, CYP		
	5RD	Tolanaro R, MDG		
	5RN	Nosy Be R, MDG		
	5RS	Toamasina R, MDG		
		Morondava R, MDG		
4375.0		coast stations, ch 407	SSB	QSX 4083.0 kHz
	EHY	Madrid R, E		
	JBO	Tokyo R, J		
	LGN 4	Rogaland R, NOR		
	LPG	Rio Gallegos R, ARG		
	OBF	Mollendo R, PRU		
	TAT	Canakkale R, TUR		
	VBA	CCG Churchill, MAN, CAN		
	VFF	CCG Iqaluit, NWT, CAN		
	VFR	CCG Resolute, NWT, CAN		
	VOK	CCG Cartwgt., NFLD, CAN		
	ZSD 37	Durban R, AFS		
	8PO	Bridgetown R, BRB		
		many RAN stations, AUS		
4377.0	'TBDJ'	UNID station (196)	ITA2 75 Bd: 2204 ry	
4378.0		coast stations, ch 408	SSB	QSX 4086.0 kHz
	HEB 14	Berne R, SUI		
	IAR	Rome R, I		
	KUQ	Pago Pago R, SMA		
	LPW	Bahia Blanca R, ARG		
	LPZ	Trelew R, ARG		
	OSU 24	Oostende R, BEL		
	PKE	Amboina R, INS		
	PZN	Paramaribo R, SUR		
	SPS 21	Witowo R, POL		
	XFC	Cozumel R, MEX		
	XFL	Mazatlan R, MEX		
	8Q2	Male R, MLD		
	9AR	Rijeka R, HRV		
4381.0		coast stations, ch 409	SSB	QSX 4089.0 kHz
	A3A	Nuku'alofa R, TON		
	A7D	Doha R, QAT		
	BVA	T'ai-pei R, TAI		
	DZI	Bacoor R, PHL		
	DZO	Bulacan R, PHL		
	HZG	Dammam R, ARS		
	IAR	Rome R, I		
	LGN 5	Rogaland R, NOR		
	OXZ	Lyngby R, DNK		
	PPJ	Juncao R, B		
	PPR	Rio de Janeiro R, B		
	PPT	Santarem R, B		
	P2M	Port Moresby R, PNG		
	TAL	Antalya R, TUR		
	WLC	Rogers City R, MI, USA		
	XSU	Yantai R, CHN		

4381.0	9GX	Tema R, GHA		
	9PA	Banana R, ZAI		
4384.0		coast stations, ch 410	SSB	QSX 4092.0 kHz
	GKT 20	Portishead R, G		
	LPG	Rio Gallegos R, ARG		
	S7Q	Victoria R, Mahe, SEY		
	VAI	CCG Vancouver, BC, CAN		
	WOO	Ocean Gate R, NJ, USA		
	XSQ	Guangzhou R, CHN		
	YJM	Port-Vila R, Efate I., VUT		
	ZLA	Awanui R, NZL		
	4PB	Colombo R, SLK		
	4XO	Haifa R, ISR		
	7TF 30	Boufarik R, ALG		
	9WH 20	K. Kinabalu R, Sb., MLA		
4387.0		coast stations, ch 411	SSB	QSX 4095.0 kHz
	EHY	Madrid R, E		
	EQO	Nowshahr R, IRN		
	FJY 4	Martin de Vivies R, AMS		
	HCG	Guayaquil R, EQA		
	LPL	General Pacheco R, ARG		
	OSU 21	Oostende R, BEL		
	PKA	Sabang R, INS		
	PKG	Banjarmasin R, INS		
	S3D	Chittagong R, BGD		
	TAH	Istanbul R, TUR		
	TAR	Zonguldak R, TUR		
	T3C	Takaronga R, T. Atl., KIR		
	VRX	Victoria Harbour R, HKG		
	WOO	Ocean Gate R, NJ, USA		
		Funafuti Island R, TUV		
4390.0		coast stations, ch 412	SSB	QSX 4098.0 kHz
	DYV	Iloilo R, PHL		
	IAR	Rome R, I		
	JFA	Funabashi F R, J		
	OBQ	Iquitos R, PRU		
	UIW	Kaliningrad R, RUS		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	WOM	Miami R, FL, USA		
	YKM 7	Al Ladhiqiyah R, SYR		
	7OA	Aden R, YEM		
4393.0		coast stations, ch 413	SSB	QSX 4101.0 kHz
	A9M	Hamala R, BHR		
	CUL	Lisbon R, POR		
	D3E	Luanda R, AGL		
	D4A	Mindelo R, S. Vicente, CPV		
	J5M	Bissau R, GNB		
	LPL	General Pacheco R, ARG		
	OHG 2	Helsinki R, FIN		
	SVN 21	Athens R, GRC		
	S3E	Khulna R, BGD		
	USO	Izmail R, UKR		
	UTW	Mariupol R, UKR		
	XFE	Ensenada R, MEX		
	XFP	Chetumal R, MEX		

4393.0	XFU	Veracruz R, MEX		
	3AC 5	Monte Carlo R, MCO		
	7TF 31	Boufarik R, ALG		
	9WW 20	Kuching R, Sarawak, MLA		
4396.0		coast stations, ch 414	SSB	QSX 4104.0 kHz
	OBC	Callao R, PRU		
	OBF	Mollendo R, PRU		
	OBQ	Iquitos R, PRU		
	OBY	Paita R, PRU		
	PKC	Palembang R, INS		
	PKF	Ujung Pandang R, INS		
	TFA	Reykjavik R, ISL		
	TFX	Siglufjoerdur R, ISL		
	UGC	Saint Petersburg R, RUS		
	WLO	Mobile R, AL, USA		
	XVS 91	Ho Chi Minh Ville R, VTN		
	ZHH	Jamestown R, SHN		
	5BA 24	Nicosia R, CYP		
	5ZF	Mombasa R, KEN		
4397.0		UNID teleprinter	200	
4399.0		coast stations, ch 415	SSB	QSX 4107.0 kHz
	ASK	Karachi R, PAK		
	DZF	Bacoor R, PHL		
	LPW	Bahia Blanca R, ARG		
	OXZ	Lyngby R, DNK		
	SVN 22	Athens R, GRC		
	UHY	Murmansk R, RUS		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	XSV	Tianjin R, CHN		
	XVR 4	Vung Tau R, VTN		
	5RL	Antsiranana R, MDG		
	5RT	Toliara R, MDG		
	9MG 8	Georgetown R, Pin. I., MLA		
		Maintirano R, MDG		
4402.0		coast stations, ch 416	SSB	QSX 4110.0 kHz
	FFL 22	Saint Lys R, F		
	FJA	Papeete R, Tahiti, OCE		
	KMI	Dixon R, CA, USA		
	LSD 836	Buenos Aires R, ARG		
	OBY	Paita R, PRU		
	PPF	Fortaleza R, B		
	PPM	Manaus R, B		
	PPR	Rio de Janeiro R, B		
	S3D	Chittagong R, BGD		
	S3E	Khulna R, BGD		
	S9M	Sao Tome R, STP		
	TFA	Reykjavik R, ISL		
	TFX	Siglufjoerdur R, ISL		
	WOO	Ocean Gate R, NJ, USA		
	6YI	Kingston R, JMC		
4405.0		coast stations, ch 417	SSB	QSX 4113.0 kHz
	KMI	Dixon R, CA, USA		
	LPM	Mar del Plata R, ARG		
	OHG 2	Helsinki R, FIN		
	OSU 27	Oostende R, BEL		

4405.0	P2M	Port Moresby R, PNG		
	P2W	Wewak R, PNG		
	TAH	Istanbul R, TUR		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	VRX	Victoria Harbour R, HKG		
	WOM	Miami R, FL, USA		
	YUW	Bar R, SRB		
	9AR	Rijeka R, HRV		
	9MG 8	Georgetown R, Pin. I., MLA		
4408.0		coast stations, ch 418	SSB	QSX 4116.0 kHz
	A3A	Nuku'alofa R, TON		
	DZJ	Bulacan R, PHL		
	DZZ	Manila R, PHL		
	D4D	Praia R, Santiago, CPV		
	JBO	Tokyo R, J		
	J2A	Jibuti R, DJI		
	LPG	Rio Gallegos R, ARG		
	LZW 28	Varna R, BUL		
	OXZ	Lyngby R, DNK		
	PKS	Pontianak R, INS		
	SAG	Goeteborg R, S		
	SUH	Alexandria R, EGY		
	WLC	Rogers City R, MI, USA		
	YQI 21	Constanta R, ROU		
	4XO	Haifa R, ISR		
4411.0		coast stations, ch 419	SSB	QSX 4119.0 kHz
	ASK	Karachi R, PAK		
	FFL 24	Saint Lys R, F		
	PPJ	Juncao R, B		
	PPL	Belem R, B		
	PPO	Olinda R, B		
	PPR	Rio de Janeiro R, B		
	TFA	Reykjavik R, ISL		
	TUA	Abidjan R, CTI		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	WLO	Mobile R, AL, USA		
	XSR	Haikou R, CHN		
	5AT	Tripoli R, LBY		
	9KK 3	Safat R, KWT		
4413.0		MA IFOR Sarajevo, BIH	SSB	
4414.0		coast stations, ch 420	SSB	QSX 4122.0 kHz
	IAR	Rome R, I		
	JYO	Aqaba R, JOR		
	LZL	Bourgas R, BUL		
	LZW	Varna R, BUL		
	OXZ	Lyngby R, DNK		
	SAG	Goeteborg R, S		
	TAF	Samsun R, TUR		
	TAH	Istanbul R, TUR		
	TAI	Iskenderun R, TUR		

4414.0	9MG 21	Georgetown R, Pin. I., MLA		
4417.0		coast stations, ch 421 (WORLDWIDE CALLING FREQUENCY)	SSB	QSX 4125.0 kHz
4420.0		coast stations, ch 422	SSB	QSX 4128.0 kHz
	ESA	Tallinn R, EST		
	HEB 34	Berne R, SUI		
	OSU 22	Oostende R, BEL		
	WOO	Ocean Gate R, NJ, USA		
	XSG	Shanghai R, CHN		
	5AB	Benghazi R, LBY		
4423.0		coast stations, ch 423	SSB	QSX 4131.0 kHz
	ASK	Karachi R, PAK		
	A7D	Doha R, QAT		
	IAR	Rome R, I		
	SPC 21	Gdynia R, POL		
	WOM	Miami R, FL, USA		
	XSQ	Guangzhou R, CHN		
	YIR	Basrah R, IRQ		
	4XO	Haifa R, ISR		
	9WH 20	K. Kinabalu R, Sb., MLA		
4426.0		coast stations, ch 424	SSB	QSX 4134.0 kHz
	HEB 24	Berne R, SUI		
	HPP 20	Panama R, PNR		
	LPX	Com. Rivadavia R, ARG		
	NMC	USCG S. Franc., CA, USA		
	NMF	USCG Boston, MA, USA		
	NMG	USCG N. Orleans, LA, USA		
	NMN	USCG Portsm., VA, USA		
	OXZ	Lyngby R, DNK		
	SAG	Goeteborg R, S		
	SVN 24	Athens R, GRC		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	XSA 2	Nanjing R, CHN		
	XSV	Tianjin R, CHN		
	ZSC 48	Cape Town R, AFS		
	7TF 32	Boufarik R, ALG		
4429.0		coast stations, ch 425	SSB	QSX 4137.0 kHz
	JBO	Tokyo R, J		
	OSU 23	Oostende R, BEL		
	OXZ	Lyngby R, DNK		
	SVN 25	Athens R, GRC		
	S9M	Sao Tome R, STP		
	5AT	Tripoli R, LBY		
	9KK 32	Safat R, KWT		
	9MG 21	Georgetown R, Pin. I., MLA		
4432.0		coast stations, ch 426	SSB	QSX 4140.0 kHz
	BVA	T'ai-pei R, TAI		
	CUB	Funchal R, MDR		
	D4A	Mindelo R, S. Vicente, CPV		
	GKV 26	Portishead R, G		
	JBO	Tokyo R, J		
	J5M	Bissau R, GNB		
	LGN 21	Rogaland R, NOR		
	LPL	General Pacheco R, ARG		
	LZR	Ruse R, BUL		

4432.0	ODR 5	Beirut R, LBN	
	5BA 26	Nicosia R, CYP	
	7TF 33	Boufarik R, ALG	
	8Q2	Male R, MLD	
4435.0		coast stations, ch 427	SSB QSX 4143.0 kHz
	CUG	Ponta Delgada R, AZR	
	IAR	Rome R, I	
	KEJ	Hoolehua R, HWA	
	KFS	San Francisco R, CA, USA	
	LZW	Varna R, BUL	
	VIB	Brisbane R, QLD, AUS	
	VID	Darwin R, NT, AUS	
	VIM	Melbourne R, VIC, AUS	
	VIP	Perth R, WA, AUS	
	VIS	Sydney R, NSW, AUS	
	VIT	Townsville R, QLD, AUS	
	WNU	Slidell R, LA, USA	
	ZSC 55	Cape Town R, AFS	
	9AR	Rijeka R, HRV	
		Horta R, Faial, AZR	
4438.0 - 4650.0		Regions 1 + 2 = FIXED + MOBILE except aeronautical mobile (R) Region 3 = FIXED + MOBILE except aeronautical mobile	
4439.0		MFA Tunis, TUN	FEC-A 96 Bd: 1515 ATU-A msgs
4440.0	FZR 44	Saint Denis Meteo, REU	ITA2 75 Bd: 0025 + 1525 + 1825 ry, wx
4442.0	4XZ	IN Haifa, ISR	CW
4443.0	DER	MOI Bonn, D	VFT: ARQ-E 96 Bd: 0545-1753 tfc or msg or encrypted msg to Bremen [HBVHF]
4444.0	DER	MOI Bonn, D	VFT: ARQ-E 72 Bd: 0744-2117 tfc or msg to Hamburg [GNVHF]
4447.0		UNID teleprinter	75
4469.0		many CAP stations, USA	SSB
4470.0	BZC 75	Ürümqi Meteo, CHN	ITA2 50 Bd: 1846-2154 wx
4475.9		UNID teleprinter	150
4476.0	'RPFNG'	PN Lisbon, POR	ITA2 75 Bd: 2000 foxes
	'P'	Beacon Kaliningrad, RUS	CW
4482.0	BJZ 25	Wuhan Meteo, CHN	ITA2 75 Bd: 0600 + 1220-2215 ry or wx
4483.0	VZX	Penta R, Gosf., NSW, AUS	SSB
4489.0	GFL 26	Bracknell Meteo, G	ITA2 75 Bd: 24 h ry or wx
4490.0	IEA 21	IA Torino, I	SSB
4492.2	IEA 21	IA Torino, I	ITA2 50 Bd: 0843-2129 encrypted tfc
4493.0	'RETWBZ'	Guardia Civil Zaragoza, E	SITOR-A: 1949 msg to 'RETWB' Barcelona
	'RETWLG'	Guardia Civil Guipuzcoa, E	SITOR-A: 1945 msgs
4500.0	GXQ	BA London, G	VFT: ITA2 50 Bd: 1908 + 1944 + 2317 ry VFT: ITA2 75 Bd: 0630 + 1907 encrypted tfc VFT: ARQ-M2 96 Bd: A: 0623 + 0634 + 2004 wx, 1908 encrypted tfc, 2256 wx
4507.0		UNID teleprinter	200
4510.0	AFE 70	USAF Cape Can., FL, USA	SSB

4512.5	**ETD 3**	**Addis Ababa Air, ETH**	**ITA2 50 Bd: 1754-0330 ry or "ch" or msgs [VKA]**
4516.0		**UNID teleprinter**	**200**
4517.0	AFA 3..	many USAF MARS st., USA	SSB
4522.0		**UNID teleprinter**	**100**
4523.0	**SNN 299**	**MFA Warsaw, POL**	**POL-ARQ 100 Bd: 1824 tfc**
4526.5	*SUU*	*Cairo Meteo, EGY*	*FAX $*
4528.0		**UNID teleprinter**	**75**
4529.0	FIS 328	CRS Chartres, F	CW
	FIS 351	CRS Chalons sur Marne, F	CW
	FIS 354	CRS Nancy, F	CW
	FIS 357	CRS Metz, F	CW
4532.0		**UNID teleprinter**	**100**
4534.5		**UNID teleprinter**	**100**
4535.5	**DEB**	**BKA Wiesbaden, D**	**FEC-A 96 Bd: 0700 clg DEB 99**
		many CC stations, PNG	SSB
4540.0	MQP	RAF Upavon, G	SSB
4542.5	**FDY**	**FAF Orleans, F**	**ITA2 50 Bd: 24 h ry**
4547.0		many NATO st., BIH/HRV	SSB
4550.5	TBU	UNID TN station (996)	CW
4553.9		**UNID teleprinter**	**150**
4560.0	CFH	CF Halifax, NS, CAN	SSB
	RKR 74	**Irkutsk Meteo, SE, RUS**	**ITA2 50 Bd: 1900+2130+2142 wx**
	RLB 27	*Moscow Meteo, RUS*	*FAX 90/576 or 120/576: 1900-0440 charts*
4563.5	**'RETWB'**	**Guardia Civil Barcelona, E**	**SITOR-A: 1900 msg, 2030 tfc**
	'RETWBL'	**Guardia Civil Lerida, E**	**SITOR-A: 0807 msg to 'RETWB' Barcelona, 1016+1640 tfc**
4568.8	**GYA**	**RN London, G**	**ITA2 75 Bd: 2250 channel status**
4570.0	**HZN 46**	**Jeddah Meteo, ARS**	**ITA2 100 Bd: 1554-0429 wx**
4570.5	*DHJ 51*	*Grengel Meteo, D*	*FAX // 2342.5 kHz $*
4575.9		**UNID teleprinter**	**ITA2 50 encrypted**
4577.0		many USAF MARS stations	SSB
4579.0		**UNID teleprinter**	**200**
4583.0	**DDK 2**	**Hamburg Meteo, D**	**ITA2 50 Bd: 24 h ry or wx**
4585.0	FIS 353	CRS Laval, F	CW
		many CAP stations, USA	SSB
4588.0		**Hamburg, D**	**VFT: ARQ-E 72 Bd: 0517-1902 tfc or msg to DER Bonn [HFVGN]**
4588.6		**UNID teleprinter**	**100**
4592.0		**UNID teleprinter**	**75**
4593.5		many USAF MARS stations	SSB
4596.0	FDI 22	FAF Narbonne, F	CW
4600.0	**SNN 299**	**MFA Warsaw, POL**	**POL-ARQ 100 Bd: 1820-1920 msgs (G nx) (!) + msgs + tfc**
4601.0	ZLBC	GPO Campbell Island, NZL	SSB
	ZME	GPO Raoul I., K. Is., NZL	SSB
4601.5	FDC	FAF Metz, F	CW
		IN Dublin, IRL	**SITOR-A: 0900+1409-2158 tfc or msgs or msg (5lgs) or wx**
4604.0		many CAP stations, USA	SSB
4605.0		**UNID teleprinter**	**81**
4607.0		**UNID teleprinter**	**ITA2 100 encrypted**
4610.0	*GFA 22*	*Bracknell Meteo, G*	*FAX // 2618.5 kHz $*
4615.0	DER	MOI Bonn, I	CW
	FDI 22	FAF Narbonne, F	CW
	'HCBG'	**UNO Gorazde, BIH**	**SITOR-A: 1832 tfc to 'HCYZ' Zagreb**
	'HCBSNBA'	**UNO Banja Luka, BIH**	**SITOR-A: 1900 msg**

4615.0	'HCBSNMO'	UNO Mostar, BIH	PACTOR: 1813 msg (E REUTER nx)
	'HCBSNPA'	UNO Pale, BIH	PACTOR: 1657 tfc; 1821 tfc to 'HCHRVZA' Zagreb
	'HCHRVSP'	UNO Split, HRV	SITOR-A: 1540 tfc to 'HCHRVZA' Zagreb
	'HCHRVZA'	UNO Zagreb, HRV	SITOR-A: 0812 tfc; 1540 msg to 'HCHRVSP' Split, final tfc, s. off; 1638 msg (E REUTER nx), 1700 compressed file "PRS0813.ZIP", 1821 msg (E REUTER nx) to 'HCBSNPA' Pale
	'HCYZ'	UNO Zagreb, HRV	SITOR-A: 1832 msg (E REUTER nx) to 'HCBG' Gorazde
4616.0	*BMF*	*T'ai-pei Meteo, TAI*	*FAX $*
	ZKV 38	DOC Auckland, NZL	SSB
4618.3	DER	MOI Bonn, D	VFT: ARQ-E 96 Bd: 0600 operational msg to Wiesbaden, 0637+0805+1018+1028 tfc to Wiesbaden [BKVHF]
4619.0	DER	MOI Bonn, D	VFT: ARQ-E 96 Bd: 24 h tfc or msg to Hamburg [GNVHF]
4619.5		UNID teleprinter	300
4620.0	DER	MOI Bonn, I	VFT: ARQ-E 96 Bd: 1028+1117 tfc to Mainz, 1800+2023 operational msg to Mainz [RPVHF]
4622.0	ZKG 31	DOC Wellington, NZL	SSB
4623.0		Polish E Vienna, AUT	POL-ARQ 100 Bd: 1540 msg to SNN 299 Warsaw
4627.0		many CAP stations, USA	SSB
4630.0		UNID teleprinter	200
4631.5		UNID teleprinter	100
4637.5		many oil rig stations, USA	SSB
4640.5		UNID teleprinter	300
4643.0		UNID teleprinter	150
4645.0		Tallinn Air, EST	SSB

4650.0 - 4700.0 AERONAUTICAL MOBILE (R)

4651.0	AMS = 1D 6C 6G 10B 10E 13E 13F	SSB
4653.0	UNID teleprinter	75
4654.0	AMS = W I/II	SSB
4657.0	AMS = AFI CEP, 2A 2C 3B 6A 6E 13H	SSB
4660.0	AMS = 2B 2C 9B 10C 13D 13M	SSB
4663.0	AMS = 6G 10F 13E 13F 13K, VNCA	SSB
4666.0	AMS = CWP, 1C 10B 10D 10E	SSB
4669.0	AMS = MID SAM, 6G 10C 10D	SSB
4672.0	AMS = 2A 2B 3A 4A 6G 11B 13K	SSB
4675.0	AMS = NAT, 6A 6E 9C 13G	SSB
4678.0	AMS = NCA, 10D 13I 14A 14G	SSB
4681.0	AMS = 2B 2C 3B 10B 12E	SSB

4684.0		AMS = 3A 3C 10E 13J 14B 14C	SSB
4687.0		AMS = W I/II/III	SSB
4690.0		AMS = 2A 2B 3A 6G 10B 13M	SSB
4693.0		AMS = 2B 2C 3 10B 12C 13I 14D	SSB
4696.0		AMS = 2 6G 9 10 13J	SSB

4700.0 - 4750.0 AERONAUTICAL MOBILE (OR)

4700.0		AMS	SSB
4703.0		AMS	SSB
	OWE	DAF Karup, DNK	
4704.0	CHR	CF Trenton, ONT, CAN	SSB
4706.0		AMS	SSB
4707.2	**'RFFVAY'**	**FF Sarajevo, BIH**	**ARQ-M2 200 Bd: A: 24 h tfc or msg (5lgs) to 'RFFP' Paris**
4709.0		AMS	SSB
4710.0	7ZA 222	SAUDIA Jeddah, ARS	SSB
4711.0		**UNID teleprinter**	**75**
4712.0		AMS	SSB
4713.4		**UNID teleprinter**	**75**
4715.0		AMS	SSB
	MVU	RAF London, G	
4716.7		**TN Tunis, TUN**	**SITOR-A: 1900 + 2054 tfc**
4718.0		AMS	SSB
4721.0		AMS	SSB
	AFA	USAF Andrews, MD, USA	
	CUW	PAF/USAF Lajes AFB, AZR	
	IDR	IN Rome, I	
4724.0		AMS	SSB
	AFA	USAF Andrews, MD, USA	
	AFE	USAF MacDill, FL, USA	
	AFH	USAF A. AFB, Balboa, PNR	
	AFI	USAF McClellan, CA, USA	
	AFS	USAF Offutt AFB, NE, USA	
	AIF	USAF Yokota, J	
	AJE	USAF Croughton, G	
	AJO	USAF Adana, TUR	
	AKA	USAF Elmendorf AFB, ALS	
	XPH	USAF Thule AFB, GRL	
4726.0		IAF Martina Franca, I	SSB
4727.0		AMS	SSB
4729.0		IAF Martina Franca, I	SSB
4730.0		AMS	SSB
4731.0	MKL	RAF Edinburgh, G	CW
4732.0		**UNID teleprinter**	**75**
4733.0		AMS	SSB
4736.0		AMS	SSB
4739.0		AMS	SSB
4742.0		AMS	SSB
	AFA	USAF Andrews, MD, USA	
	DHN 66	GAF Geilenkirchen, D	
	MQP	RAF Upavon, G	
		RAF Wideawake, ASC	
4745.0		AMS	SSB
	AFE	USAF MacDill, FL, USA	
	AFI	USAF McClellan, CA, USA	

4745.0	CUW	PAF/USAF Lajes AFB, AZR	
4750.0 - 4850.0		Region 1 = AERONAUTICAL MOBILE (OR) + BROADCASTING + FIXED + LAND MOBILE Region 2 = BROADCASTING + FIXED + MOBILE except aeronautical mobile (R) Region 3 = BROADCASTING + FIXED + Land Mobile	
4751.0	'RETWLG'	Guardia Civil Guipuzcoa, E	SITOR-A: 0905 msg + tfc to 'RETXX' Madrid, 1130 tfc
	'RETXX'	MOI Madrid, E	SITOR-A: 0642+0804 tfc; 0905 tfc to 'RETWLG' Guipuzcoa, 2000 tfc to 'RETYMA' Avila
	'RETYMA'	Guardia Civil Avila, E	SITOR-A: 2000 tfc to 'RETXX' Madrid
4752.5	'RETWLG'	Guardia Civil Guipuzcoa, E	SSB
	'RETZS'	Guardia Civil Sevilla, E	SITOR-A: 1946 tfc to 'RETZSE' Melilla
	'RETZSE'	Guardia Civil Melilla, E	SITOR-A: 1946 tfc to 'RETZS' Sevilla
4757.0		Medea Prefecture, ALG	ITA2 50 Bd: 0817 msgs to 7RA 20 El Djaza'ir
4763.0		many stns., BIH/HRV/SRB	SSB
4764.0	CCS	CN Santiago, CHL	ITA2 100 Bd: 0310 tfc, 0417 msg (5lgs), 0700+0925 ry, 2230 tfc
4765.2	'RFFP'	MOD Paris, F	ARQ-M2 200 Bd: A: 1638 msg (5lgs) after "BBBB" to 'RFFVAY' Sarajevo [FDX] B: 2210 AFTN msg [FDX]
4770.0	NGD	USN McMurdo Sound, ATA	SSB
4777.5	*IMB 51*	*Rome Meteo, I*	*FAX $*
4782.5		UNID station (1295)	ARQ-E 86 Bd: 1026 encrypted tfc
4785.5		UNID Gda. Civil st. (1195)	SITOR-A: 1020 final tfc, s. off
4788.0	6VU 23	Dakar Meteo, SEN	ITA2 50 Bd: 2144-0440 ry or msg
4794.0		UNID teleprinter	75
4798.0		UNID teleprinter	ARQ-E 86 Bd encrypted
4800.0	VJI	RFDS Mt. Isa, QLD, AUS	SSB
4801.5	FDE 5	FAF Evreux, F	CW
4804.0	RIT	CISN Vaygach, RUS	CW
4807.0	GKX	Portishead Air, G	SSB
4810.0		UNID teleprinter	100
4811.5		UNID teleprinter	100
4813.0	LZA 8	Sofia Meteo, BUL	ITA2 50 Bd: 24 h ry or wx
4818.3	CCM	CN Magallanes, CHL	ITA2 100 Bd: 0730 wx
4850.0 - 4995.0		BROADCASTING + FIXED + LAND MOBILE	
4852.5	'HCHZ'	UNO Zagreb, HRV	SITOR-A: 1633 msg (E REUTER nx) + tfc, 1813 tfc to 'HCBSNSA' Sarajevo
4854.0	'HCBSNBA'	UNO Banja Luka, BIH	SITOR-A: 0000+1500 msg, 1840 tfc
	'HCBSNBI'	UNO Bihac, BIH	PACTOR: 1800 tfc to 'HCBSNSA' Sarajevo
	'HCBSNPA'	UNO Pale, BIH	PACTOR: 1743 tfc; 1817 tfc to 'HCYUGBE' Belgrade

4854.0	**'HCBSNSA'**	**UNO Sarajevo, BIH**	**PACTOR: 0720-1800 tfc or msgs or msg (E nx) to 'HCBSNBI' Bihac or 'HCHRVME' Metkovic or 'HCHRVZA' Zagreb**
	'HCBSNZE'	**UNO Zenica, BIH**	**SITOR-A: 0743 msg to 'HCHRVSP' Split**
	'HCHRVME'	**UNO Metkovic, HRV**	**SITOR-A: 0604 tfc + msg, 1335 msg to 'HCBSNSA' Sarajevo, 1800 tfc**
	'HCHRVSP'	**UNO Split, HRV**	**SITOR-A: 0743 tfc to 'HCBSNZE' Zenica**
	'HCHRVZA'	**UNO Zagreb, HRV**	**PACTOR: 0720+1507-1838 tfc or msg to 'HCBSNSA' Sarajevo**
	'HCHZ'	**UNO Zagreb, HRV**	**SITOR-A: 0602 final tfc, s. off; 0627+0720 msg, 0810+0822 tfc, 1840 msg (E HINA nx)**
	'HCYUGBE'	**UNO Belgrade, SRB**	**PACTOR: 1719 tfc; 1817 msg to 'HCBSNPA' Pale**
4855.0	*NPM*	*USN Pearl Harbour, HWA*	*FAX $*
4855.7		**UNID Balkan UNO station (796)**	**PACTOR: 1650 final E tfc, s. off**
4856.0	**FDY**	**FAF Orleans, F**	**ITA2 50 Bd: 0515-1230 ry**
4857.0		*USAF AWS Ceiba, PTR*	*FAX // 3232.0 kHz*
		MFA Bucharest, ROU	**RUM-FEC 164 Bd: 1815 msg to Vienna**
			CW
4860.0	**VZ8 SK**	**RFDS Katherine, NT, AUS**	**SSB**
4861.7		**Bihac Police, BIH**	**Clover: 1725 msgs to Sarajevo**
4867.8		**UNID station (796)**	**ITA2 50 Bd: 1445 encrypted tfc**
4871.0		**UNID teleprinter**	**200**
4873.5	**IBA**	**USN Napoli, I**	**SSB**
	IBH	**USAF Vicenza, I**	**SSB**
4875.5	**'RETWVP'**	**Guardia Civil Palencia, E**	**SITOR-A: 1958 msg**
4880.0	**VJK**	**RFDS Meekath., WA, AUS**	**SSB**
		UNID teleprinter	**75**
4883.0	**FDC 7**	**FAF Strasbourg, F**	**CW**
	FDC 8	**FAF Colmar, F**	**CW**
4891.5		**UNID teleprinter**	**192**
4898.0	**OMS**	**MFA Bratislava, SVK**	**IRA-ARQ 292 Bd: 0804 msg (Slovak press review)**
4900.0	**AFE 70**	**USAF Cape Can., FL, USA**	**SSB**
	OLZ	**MFA Prague, CZE**	**IRA 300 Bd: 1330 encrypted tfc** **ITA2 100 Bd: 0824-0856+1034 msgs or msgs (5fgs) or msg (Czech nx)**
4903.0	**DHM 44**	**Grengel Meteo, D**	**ITA2 100 Bd: 0651-1738 wx**
4905.0	**BSB 22**	**Lanzhou Meteo, CHN**	**ITA2 75 Bd: 1200-1349+1803 ry or wx**
4912.0		**Polish E Paris, F**	**POL-ARQ 100 Bd: 1930 msgs (5fgs) + final tfc to SNN 299 Warsaw, s. off**
4913.0	**'RETWLN'**	**Guardia Civil Pamplona, E**	**SITOR-A: 2028 msg** **SITOR-B: 1715 msg to 'RETWLV' Bilbao**
4914.5	**FDG**	**FAF Bordeaux, F**	**CW**
4915.5		**UNID teleprinter**	**100**
4920.0		**UNID teleprinter**	**100**
4921.7	**FWH 96**	**UNID station (996)**	**PACTOR: 1551 tfc "file fwha19oa saved"**
4922.5	**DHJ 51**	**Grengel Meteo, D**	**ITA2 100 Bd: 0813-1746 wx**

4923.0	'HCBSNSA'	UNO Sarajevo, BIH	SSB
4926.0	VJN	RFDS Cairns, QLD, AUS	SSB
	VJT	RFDS Carnarvon, WA, AUS	SSB
4930.5	SPW	Warsaw R, POL	SITOR-A: 0726+1628-2135 tts SITOR-B: 0100+0300+0500+1700+1900+2100+2300 tfc list CW
		many NATO st., BIH/HRV	SSB
4932.0	SPW	Warsaw R, POL	SSB
4935.0	VJI	RFDS Mt. Isa, QLD, AUS	SSB
4941.5	FDI 8	FAF Nice, F	CW
4944.0		UNID station (896)	ARQ-E 86 Bd: 1018 encrypted tfc; code statistics peaks at 0 and 25
4962.0		Polish E Belgrade, SRB	POL-ARQ 100 Bd: 1857 msg to SNN 299 Warsaw
		Polish E Bucharest, ROU	POL-ARQ 100 Bd: 1644 msgs + tfc to SNN 299 Warsaw
		Polish E Madrid, E	POL-ARQ 100 Bd: 1630 msg to SNN 299 Warsaw
		Polish E Mensk, BLR	POL-ARQ 100 Bd: 1850 msg to SNN 299 Warsaw
4967.0	*NDT*	*USN Totsuka, J*	*FAX // 10253.0 kHz $*
		UNID teleprinter	74
4971.1	DER	MOI Bonn, D	VFT: ARQ-E 72 Bd: 1700 tfc to Berlin [BRUHF]
4971.7		Kiel, D	VFT: ARQ-E 96 Bd: 24 h msg [PHVSH]
4972.4		Hamburg, D	VFT: ARQ-E 96 Bd: 24 h msg to DER Bonn [HFVHH]
4976.3	DER	MOI Bonn, D	VFT: ARQ-E 96 Bd: 1800 operational msg to Erfurt [THVHF]
4977.3	DER	MOI Bonn, D	VFT: ARQ-E 96 Bd: 24 h msgs or to encrypted msgs after "EEE..." to München [BYVHF]
4978.0	DER	MOI Bonn, D	VFT: ARQ-E 72 Bd: 0756-1635 tfc or operational msg or msg to München [GSVHF]
4979.7	DER	MOI Bonn, D	VFT: ARQ-E 96 Bd: 24 h msgs to Stuttgart [BWVHF]
4980.0	VJJ	RFDS Charlevl., QLD, AUS	SSB
4986.0	YPI	Turnu Severin, ROU	CW
	YPM	Cluj, ROU	CW
	YPO	Giurgiu, ROU	CW
4991.7	'RFFVAY'	FF Sarajevo, BIH	ARQ-M2 200 Bd: A: 2016+2124 tfc to 'RFFP' Paris
4992.0	AFE 70	USAF Cape Can., FL, USA	SSB

4995.0 - 5003.0 STANDARD FREQUENCY AND TIME SIGNAL

4996.0	RWM	Moscow TS, RUS	CW
5000.0	ATA	Delhi TS, IND	SSB
	BPM	Xi'an TS, CHN	CW/SSB
	HD2 IOA	Guayaquil TS, EQA	CW/SSB
	HLA	Taejon TS, KOR	COMB
	JJY	Tokyo TS, J	COMB
	LOL 1	AN Buenos Aires, ARG	CW/SSB
	RCH	Tashkent TS, UZB	CW
	VNG	Sydney TS, NSW, AUS	COMB
	WWV	Fort Collins TS, CO, USA	COMB

5000.0	WWVH	Kihei TS, Maui Island, HWA	COMB
	YVTO	Caracas TS, VEN	CW/SSB

5003.0 - 5005.0 STANDARD FREQUENCY AND TIME SIGNAL + Space Research

5004.0	RID	Irkutsk TS, SE, RUS	CW

5005.0 - 5060.0 BROADCASTING + FIXED <503>

5008.5	'RETYMC'	Guardia Civil Caceres, E	SITOR-B: 1840 msg
	'RETYMV'	Guardia Civil Cuenca, E	SITOR-A: 1357 msg to 'RETYMG' Guadalajara
	'RETYV'	Guardia Civil Valencia, E	SITOR-A: 0105 msg to 'RETYVC' Castellon, 0636 msg + tfc to 'RETYVC' + Murcia, 0815 msg + tfc to Murcia
	'RETYVA'	Guardia Civil Alicante, E	SITOR-A: 2018 msg
	'RETYVC'	Guardia Civil Castellon, E	SITOR-A: 1955 msgs
	'RETZS'	Guardia Civil Sevilla, E	SITOR-A: 0630 msgs
	'RETZSH'	Guardia Civil Huelva, E	SITOR-A: 1420 msg to 'RETXX' Madrid
		Guardia Civil Murcia, E	SITOR-A: 0815 tfc to 'RETYV' Valencia
5009.0		UNID teleprinter	81
5010.0	FDE	FAF Villacoublay, F	CW
	VJQ	RFDS Kalgoorlie, WA, AUS	SSB
5014.0		UNID teleprinter	75
5015.0	'RPTI'	PN Ponta Delgada, AZR	ITA2 75 Bd: 0300 ry, 2005 clg 'RPFN' Lisbon
5023.2		München, D	VFT: ARQ-E 96 Bd: 0925 msg "qvp zur laufnummernueberpruefung" to DER Bonn, 0957 msg to DER, 1056 + 1512 + 2026 tfc to DER [HFVBY]
5023.5	DER	MOI Bonn, D	VFT: ARQ-E 72 Bd: 1029 msg to Hamburg, 1546 + 1646 tfc to Hamburg [GNVHF]
5023.8		Berlin, D	VFT: ARQ-E 96 Bd: 1031-1711 tfc or encrypted msg to DER Bonn [HFVBR]
5024.5		Stuttgart, D	VFT: ARQ-E 96 Bd: 0629-1546 + 2026 encrypted msg or tfc
5029.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 2207 msg (Bulgarian nx)
5033.0	FIS 392	CRS Nanterre, F	CW
5036.7		MFA Cairo, EGY	SITOR-A: 1812 + 1832 ATU-A tfc
5043.9		UNID teleprinter	150
5045.0	TBA	TN Ankara, TUR	CW
5049.2	CSP ..	Viseu Police, POR	SITOR-A: 0818 + 1727 tfc SITOR-B: 0820 + 1713 + 1729 + 2027 tfc or msg
5055.0	JYF	PETRA Amman, JOR	ITA2 50 Bd: 1400 + 1500 A nx, 1700-1900 E nx

5060.0 - 5250.0 FIXED + Mobile except aeronautical mobile <521>

5063.0		UNID teleprinter	55

5064.0	9MB	MN Georgetown, P.I., MLA	CW
5070.0	OLZ	MFA Prague, CZE	IRA-ARQ 400 Bd: 0658 encrypted msg, final tfc, s. off ITA2 100 Bd: 0724-1030 msg (Czech nx)
5070.5	OEC	MFA Vienna, AUT	SI-ARQ 96 Bd: 6 characters: 1242 + 1322 tfc to Belgrade
	OEC ..	Austrian E Belgrade, SRB	SI-ARQ 96 Bd: 6 characters: 0828 + 1242 tfc to OEC Vianna, 1322 msg (G press review) + msg (5lgs) to OEC
5070.8	'49'	FA IFOR Sarajevo, BIH	SSB
5071.7	'RFFA'	MOD Paris, F	ARQ-E3 192 Bd: 2130-0701 tfc or "controle de voie" to 'RFTJ' Dakar [LFA]
5072.0		UNID teleprinter	81
5073.5		UNID teleprinter	MFSK
5075.0		UNID teleprinter	300
5082.2		UNID FF station (1096)	ARQ-E3 192 Bd: 0236 + 0610 tfc
5083.0	DHJ 51	Grengel Meteo, D	ITA2 100 Bd: 0634-1520 wx
5084.0	'HCBSNSA'	UNO Sarajevo, BIH	SSB
5086.0		UNID teleprinter	75
5095.0		UNID teleprinter	75
5097.0	CFH	CF Halifax, NS, CAN	ITA2 75 Bd: 2023-1100 tfc
5099.7	'RFTJ'	FF Dakar, SEN	ARQ-E3 192 Bd: 0544 operational msg to 'RFFA' Paris, 2152 tfc to 'RFFA' [AFL]
5100.0	*AXM 32*	*Melbourne Met., VIC, AUS*	*FAX // 2628.0 kHz $*
	BDF	*Shanghai Meteo, CHN*	*FAX 120/576: 2230-0956 charts*
		UNID teleprinter	75
5102.0	*RDE 72*	*Samara Meteo, RUS*	*FAX 60/576: 1547 + 1649 + 1720 charts*
5109.7		UNID station (196)	T-PLEX 8 tones: 2111 tfc
5110.0	VJI	RFDS Mt. Isa, QLD, AUS	SSB
		many NATO st., BIH/HRV	SSB
5111.0	'P'	Beacon Kaliningrad, RUS	CW
5113.0		UNID teleprinter	116
5114.0		UNID teleprinter	ITA2 50 encrypted
5118.0	'G8T'	French E Belgrade, SRB	FEC-A 192 Bd: 1642 clg 'P6Z' Paris, s. off
5121.0	'RFFHCA'	FF Ajaccio, F	ARQ-E 192 Bd: 1119 + 1430 tfc
5123.5	'P6Z'	MFA Paris, F	FEC-A 192 Bd: 1605 tfc to 'F9S' Prague, 1618 msg (5lgs), 1750 clg + tfc to 'H6L' El Djaza'ir, 1845 msg
5141.0		UNID teleprinter	75
5144.0	'RC2BAL'	ICRC Banja Luka, BIH	PACTOR: 0801 msg to 'RC2BEL' Belgrade, 1050 msg to 'RC2VOJ' Vojnic
	'RC2BEL'	ICRC Belgrade, SRB	PACTOR: 0801 tfc to 'RC2BAL' Banja Luka, 1730 msg to 'RC2PAL' Pale
	'RC2BIH'	ICRC Bihac, BIH	PACTOR: 1028 msg
	'RC2BIJ'	ICRC Bijeljina, BIH	PACTOR: 1919 tfc
	'RC2DAL'	ICRC Dalj, HRV	PACTOR: 1037 + 1405 + 1710 + 1731 tfc to 'RC2ZAG' Zagreb
	'RC2KNI'	ICRC Knin, HRV	PACTOR: 1433 msg to 'RC2SPL' Split

5144.0	**'RC2MBO'**	**ICRC Zagreb, HRV**	**PACTOR: 0730 msgs + tfc to 'RC2SAR' Sarajevo, 1402 tfc to 'RC2SPL' Split**
	'RC2MOT'	**ICRC Mostar, BIH**	**PACTOR: 1658 msg to 'RC2ZAG' Zagreb**
	'RC2OSI'	**ICRC Osijek, HRV**	**PACTOR: 1325 tfc to 'RC2ZAG' Zagreb**
	'RC2PAL'	**ICRC Pale, BIH**	**PACTOR: 1705 tfc, 1730 tfc to 'RC2BEL' Belgrade, 1753 tfc**
	'RC2SAR'	**ICRC Sarajevo, BIH**	**PACTOR: 0730-1624 tfc or msgs to 'RC2MBO' Zagreb or 'RC2ZAG' Zagreb or 'RC2ZEN' Zenica**
	'RC2SPL'	**ICRC Split, HRV**	**PACTOR: 1402 msg to 'RC2MBO' Zagreb, 1433 tfc to 'RC2KNI' Knin, 1603 tfc**
	'RC2TUZ'	**ICRC Tuzla, BIH**	**PACTOR: 1545+1615 msgs**
	'RC2VOJ'	**ICRC Vojnic, HRV**	**PACTOR: 1040 tfc to 'RC2ZAG' Zagreb, 1050 tfc to 'RC2BAL' Banja Luka**
	'RC2ZAG'	**ICRC Zagreb, HRV**	**PACTOR: 0700-1731 tfc or msgs to 'RC2DAL' Dalj or 'RC2MOT' Mostar or 'RC2OSI' Osijek or 'RC2VOJ' Vojnic or 'RC2ZEN' Zenica**
	'RC2ZEN'	**ICRC Zenica, BIH**	**PACTOR: 0944 tfc to 'RC2SAR' Sarajevo, 1042 msg to 'RC2ZAG' Zagreb**
		UNID teleprinter	81
5145.0	VJN	RFDS Cairns, QLD, AUS	SSB
	VNZ	RFDS Pt. Augusta, SA, AUS	SSB
5147.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1308 final tfc, s. off
5149.0	**'RC2BAL'**	**ICRC Banja Luka, BIH**	**PACTOR: 0919 msg, 1354 msg to 'RC2BEL' Belgrade, 1620 tfc**
	'RC2BEL'	**ICRC Belgrade, SRB**	**PACTOR: 1354 tfc to 'RC2BAL' Banja Luka, 1715 tfc to 'RC2SAR' Sarajevo**
	'RC2BIJ'	**ICRC Bijeljina, BIH**	**PACTOR: 1530 msg to 'RC2ZAG' Zagreb**
	'RC2SAR'	**ICRC Sarajevo, BIH**	**PACTOR: 1715 msg to 'RC2BEL' Belgrade**
	'RC2TUZ'	**ICRC Tuzla, BIH**	**PACTOR: 1007 tfc**
	'RC2VOJ'	**ICRC Vojnic, HRV**	**PACTOR: 1522 msg**
	'RC2ZAG'	**ICRC Zagreb, HRV**	**PACTOR: 1507-1734 tfc or msgs to 'RC2BIJ' Bijeljina**
5150.0	*RVO 73*	*Moscow Meteo, RUS*	*FAX // 53.6 kHz $*
		UNID teleprinter	100
5153.9	'S'	Beacon Arkhangelsk, RUS	CW
5154.0	'C'	Beacon Moscow, RUS	CW
	'RC2BAL'	**ICRC Banja Luka, BIH**	**PACTOR: 0900-1700 tfc or msgs to 'RC2BEL' Belgrade or 'RC2BIJ' Bijeljina or 'RC2DAL' Dalj or 'RC2KNI' Knin or 'RC2PAL' Pale or 'RC2ZAG' Zagreb**
	'RC2BEL'	**ICRC Belgrade, SRB**	**PACTOR: 1024 tfc to 'RC2KNI' Knin, 1530 tfc to 'RC2BAL' Banja Luka, 1620 tfc**
	'RC2BIH'	**ICRC Bihac, BIH**	**PACTOR: 0715+1651 msgs to 'RC2ZAG' Zagreb**

5154.0	'RC2BIJ'	ICRC Bijeljina, BIH	PACTOR: 0820+0854 tfc, 1510 tfc to 'RC2BAL' Banja Luka, 1516 msg to 'RC2PAL' Pale, 1616+1621 tfc
	'RC2DAL'	ICRC Dalj, HRV	PACTOR: 0900-1041+1530-1635 tfc to 'RC2BAL' Banja Luka or 'RC2ZAG' Zagreb
	'RC2KLA'	ICRC Kladanj, BIH	PACTOR: 0857 tfc, 1018 msg to 'RC2VOJ' Vojnic
	'RC2KNI'	ICRC Knin, HRV	PACTOR: 0753-1609 tfc or msgs to 'RC2BAL' Banja Luka or 'RC2BEL' Belgrade or 'RC2MBO' Zagreb
	'RC2MBO'	ICRC Zagreb, HRV	PACTOR: 0753 tfc to 'RC2KNI' Knin
	'RC2MOT'	ICRC Mostar, BIH	PACTOR: 0751 msg + tfc to 'RC2ZAG' Zagreb
	'RC2OSI'	ICRC Osijek, HRV	PACTOR: 0629+0848+1505-1557+1658 tfc to 'RC2ZAG' Zagreb
	'RC2PAL'	ICRC Pale, BIH	PACTOR: 0957 msg to 'RC2ZAG' Zagreb, 1516 tfc to 'RC2BIJ' Bijeljina, 1700 tfc to 'RC2BAL' Banja Luka
	'RC2PET'	ICRC Petrinja, HRV	PACTOR: 0748+1523 tfc
	'RC2SAR'	ICRC Sarajevo, BIH	PACTOR: 0804-1633 tfc or msgs to 'RC2BIJ' Bijeljina or 'RC2TUZ' Tuzla or 'RC2ZEN' Zenica
	'RC2SPL'	ICRC Split, HRV	PACTOR: 0916+1635 tfc
	'RC2TRE'	ICRC Trebinje, BIH	PACTOR: 1559 tfc + msg to 'RC2MOT' Mostar
	'RC2TUZ'	ICRC Tuzla, BIH	PACTOR: 1544 msg, 1606 tfc to 'RC2SAR' Sarajevo
	'RC2VOJ'	ICRC Vojnic, HRV	PACTOR: 0924 msg to 'RC2ZAG' Zagreb, 1018 tfc to 'RC2KLA' Kladanj, 1525+1542+1631 tfc to 'RC2ZAG'
	'RC2VUK'	ICRC Vukovar, HRV	PACTOR: 0627 tfc to 'RC2ZAG' Zagreb, 0852 msg ("SITREP")
	'RC2ZAG'	ICRC Zagreb, HRV	PACTOR: 0627-1656 tfc or msgs or msg (E nx) to 'RC2BAL' Banja Luka or 'RC2BIH' Bihac or 'RC2DAL' Dalj or 'RC2MOT' Mostar or 'RC2OSI' Osijek or 'RC2PAL' Pale or 'RC2VOJ' Vojnic or 'RC2VUK' Vukovar
	'RC2ZEN'	ICRC Zenica, BIH	PACTOR: 0804 msg to 'RC2SAR' Sarajevo, 1211+1632 tfc to 'RC2SAR'
5155.0		UNID teleprinter	CIS 10-11-11 MFSK
5155.9		UNID teleprinter	150
5157.0		UNID teleprinter	ITA2 50 encrypted
5159.0	'RC2BAL'	ICRC Banja Luka, BIH	PACTOR: 0833+1254-1700 tfc to 'RC2MBO' Zagreb or 'RC2PAL' Pale or 'RC2ZAG' Zagreb
	'RC2BEL'	ICRC Belgrade, SRB	PACTOR: 1140-1908 tfc or msgs to 'RC2DAL' Dalj or 'RC2MBO' Zagreb or 'RC2ZAG' Zagreb
	'RC2BIH'	ICRC Bihac, BIH	PACTOR: 0756 msg to 'RC2MBO' Zagreb

5159.0	'RC2BIJ'	ICRC Bijeljina, BIH	PACTOR: 1108 tfc to 'RC2ZAG' Zagreb, 1458 msg to 'RC2MBO' Zagreb
	'RC2DAL'	ICRC Dalj, HRV	PACTOR: 1753 tfc to 'RC2BEL' Belgrade
	'RC2KNI'	ICRC Knin, HRV	PACTOR: 0750 + 1330-1731 tfc or msgs to 'RC2MBO' Zagreb or 'RC2MOT' Mostar
	'RC2MBO'	ICRC Zagreb, HRV	PACTOR: 0644-1908 tfc or msgs or msg (E REUTER nx) to 'RC2BAL' Banja Luka or 'RC2BEL' Belgrade or 'RC2BIH' Bihac or 'RC2KNI' Knin or 'RC2MOT' Mostar or 'RC2PAL' Pale or 'RC2SAR' Sarajevo or 'RC2SPL' Split or 'RC2TUZ' Tuzla or 'RC2VOJ' Vojnic or 'RC2ZAG' Zagreb or 'RC2ZEN' Zenica
	'RC2MOT'	ICRC Mostar, BIH	PACTOR: 1330 msg to 'RC2KNI' Knin, 1652 tfc to 'RC2MBO' Zagreb
	'RC2PAL'	ICRC Pale, BIH	PACTOR: 0834-1605 tfc or msgs or msg (E REUTER nx) to 'RC2MBO' Zagreb or 'RC2PAL' Pale
	'RC2SAR'	ICRC Sarajevo, BIH	PACTOR: 0644-1714 tfc or msgs to 'RC2MBO' Zagreb
	'RC2SPL'	ICRC Split, HRV	PACTOR: 0749-1520 tfc or msgs to 'RC2MBO' Zagreb or 'RC2TUZ' Tuzla or 'RC2ZAG' Zagreb
	'RC2TUZ'	ICRC Tuzla, BIH	PACTOR: 1520 msg to 'RC2SPL' Split, 1555 tfc to 'RC2MBO' Zagreb
	'RC2VOJ'	ICRC Vojnic, HRV	PACTOR: 1100-1630 tfc or msgs to 'RC2MBO' Zagreb
	'RC2ZAG'	ICRC Zagreb, HRV	PACTOR: 0718-1958 tfc or msgs to 'RC2BAL' Banja Luka or 'RC2BEL' Belgrade or 'RC2BIJ' Bijeljina or 'RC2MBO' Zagreb or 'RC2SPL' Split or 'RC2VOJ' Vojnic
	'RC2ZEN'	ICRC Zenica, BIH	PACTOR: 1315 tfc to 'RC2MBO' Zagreb
5160.0	IER 20	IFG Rome, I	ITA2 100 Bd: 0916 ry
	5UA	ASECNA Niamey, NGR	ARQ-M2 96 Bd: B: 2110-0214 tfc or msg
			ITA2 50 Bd: 2105 msgs [NUA]
		Sydney Air, NSW, AUS	SSB
		UNID teleprinter	200
5161.0		UNID teleprinter	81
5163.0		UNID teleprinter	75
5163.5	FDI 22	FAF Narbonne, F	CW
5164.0	'RC2BAL'	ICRC Banja Luka, BIH	PACTOR: 1030-1758 tfc or msgs to 'RC2BEL' Belgrade or 'RC2BIJ' Bijeljina or 'RC2PAL' Pale or 'RC2ZAG' Zagreb
	'RC2BEL'	ICRC Belgrade, SRB	PACTOR: 1300-1713 tfc or msgs to 'RC2BAL' Banja Luka
	'RC2BIH'	ICRC Bihac, BIH	PACTOR: 0957 msgs to 'RC2ZAG' Zagreb, 1445 msg to 'RC2OSI' Osijek, 1630 tfc, 1914 msg to 'RC2MBO' Zagreb

5164.0	'RC2BIJ'	ICRC Bijeljina, BIH	PACTOR: 1346-1740 tfc or msgs to 'RC2BAL' Banja Luka or 'RC2OSI' Osijek or 'RC2ZAG' Zagreb
	'RC2DAL'	ICRC Dalj, HRV	PACTOR: 1525-1852 tfc or msgs to 'RC2MBO' Zagreb
	'RC2GOR'	ICRC Gorazde, BIH	PACTOR: 1500 msg to 'RC2SAR' Sarajevo
	'RC2KNI'	ICRC Knin, HRV	PACTOR: 1841 msgs to 'RC2ZAG' Zagreb
	'RC2MBO'	ICRC Zagreb, HRV	PACTOR: 0748 + 1648-1914 tfc or msgs to 'RC2BIH' Bihac or 'RC2DAL' Dalj' or 'RC2PAL' Pale or 'RC2ZAG' Zagreb
	'RC2MOT'	ICRC Mostar, BIH	PACTOR: 1528 tfc to 'RC2PAL' Pale, 1720 tfc to 'RC2SAR' Sarajevo
	'RC2OKU'	ICRC Okucani, HRV	PACTOR: 0941 msg to 'RC2ZAG' Zagreb
	'RC2OSI'	ICRC Osijek, HRV	PACTOR: 0859-1858 tfc or msgs to 'RC2BIH' Bihac or 'RC2BIJ' Bijeljina or 'RC2MBO' Zagreb
	'RC2PAL'	ICRC Pale, BIH	PACTOR: 0748-1752 tfc or msgs to 'RC2BAL' Banka Luka or 'RC2BIJ' Bijeljina or 'RC2MBO' Zagreb or 'RC2MOT' Mostar or 'RC2TRE' Trebinje or 'RC2ZAG' Zagreb or 'RC2ZEN' Zenica
	'RC2SAR'	ICRC Sarajevo, BIH	PACTOR: 1256-1720 tfc or msgs to 'RC2GOR' Gorazde or 'RC2MBO' Zagreb or 'RC2MOT' Mostar or 'RC2ZAG' Zagreb or 'RC2ZEN' Zenica
	'RC2SPL'	ICRC Split, HRV	PACTOR: 0720 + 1000 + 1031 tfc
	'RC2TRE'	ICRC Trebinje, BIH	PACTOR: 0835 msg to 'RC2PAL' Pale, 1320 tfc
	'RC2TUZ'	ICRC Tuzla, BIH	PACTOR: 1015 + 1551 tfc
	'RC2VOJ'	ICRC Vojnic, HRV	PACTOR: 0858 + 0920 tfc to 'RC2ZAG' Zagreb, 1600 tfc
	'RC2ZAG'	ICRC Zagreb, HRV	PACTOR: 0855-1841 tfc or msgs to 'RC2BAL' Banja Luka or 'RC2BIH' Bihac or 'RC2BIJ' Bijeljina or 'RC2DAL' Dalj or 'RC2KNI' Knin or 'RC2MBO' Zagreb or 'RC2OKU' Okucani or 'RC2OSI' Osijek or 'RC2PAL' Pale or 'RC2SAR' Sarajevo or 'RC2VOJ' Vojnic
	'RC2ZEN'	ICRC Zenica, BIH	PACTOR: 0730 msg, 0813 + 1031 tfc, 1516 tfc to 'RC2SAR' Sarajevo, 1526 tfc to 'RC2PAL' Pale, 1543 tfc
5164.4		UNID teleprinter	100
5164.5	FIT 5	Gap Prefecture, F	SITOR-B: 1616 tfc
	FIT 18	UNID Prefecture station, F (196)	SITOR-A: 0835 tfc, 0945 s. on with tfc to FIT 37 Tours

5164.5	FIT 37	Tours Prefecture, F	SITOR-A: 0720 tfc; 0825 s. on with tfc; 0913 tfc; 0945 s. on with clg + tfc + final tfc "bon appetit et a 15h00" to FIT 18, s. off; 1736 tfc CW
	FIT 45	Orleans Prefecture, F	SITOR-A: 0809 tfc SITOR-B: 1315 test
	FIT 57	Metz Prefecture, F	SITOR-B: 0905 tfc
5166.0		UNID teleprinter	81
5169.0	'RC2BAL'	ICRC Banja Luka, BIH	PACTOR: 1036-1828 tfc or msg or msg (E nx) to 'RC2MBO' Zagreb or 'RC2PAL' Pale or 'RC2ZAG' Zagreb
	'RC2BEL'	ICRC Belgrade, SRB	PACTOR: 0914-1718 tfc or msgs to 'RC2MBO' Zagreb
	'RC2BIJ'	ICRC Bijeljina, BIH	PACTOR: 0820 tfc
	'RC2DAL'	ICRC Dalj, HRV	PACTOR: 0840 tfc
	'RC2KNI'	ICRC Knin, HRV	PACTOR: 1113-1928 tfc or msgs to 'RC2MBO' Zagreb or 'RC2ZAG' Zagreb
	'RC2MBO'	ICRC Zagreb, HRV	PACTOR: 0600-1928 tfc or msgs or msg (daily newages) or msg (E HINA nx) or msg (E REUTER nx) or msg (weekly situation report) or msg (Bihac sitrep) to 'RC2BAL' Banja Luka or 'RC2BEL' Belgrade or 'RC2KNI' Knin or 'RC2MOT' Mostar or 'RC2OKU' Okucani or 'RC2SAR' Sarajevo or 'RC2SPL' Split or 'RC2TUZ' Tuzla or 'RC2VOJ' Vojnic or 'RC2VUK' Vukovar or 'RC2ZAG' Zagreb or 'RC2ZEN' Zenica
	'RC2MOT'	ICRC Mostar, BIH	PACTOR: 1605 tfc to 'RC2MBO' Zagreb
	'RC2OKU'	ICRC Okucani, HRV	PACTOR: 1520 msg to 'RC2MBO' Zagreb
	'RC2PAL'	ICRC Pale, BIH	PACTOR: 0759-1950 tfc or msgs to 'RC2BAL' Banja Luka or 'RC2MBO' Zagreb or 'RC2ZAG' Zagreb
	'RC2SAR'	ICRC Sarajevo, BIH	PACTOR: 1000 + 1421-1618 tfc or msgs to 'RC2MBO' Zagreb
	'RC2SPL'	ICRC Split, HRV	PACTOR: 0858-1459 tfc to 'RC2MBO' Zagreb
	'RC2TUZ'	ICRC Tuzla, BIH	PACTOR: 0600-1715 tfc or msgs to 'RC2MBO' Zagreb
	'RC2VOJ'	ICRC Vojnic, HRV	PACTOR: 0652-0954 + 1416 tfc or msgs to 'RC2MBO' Zagreb or 'RC2ZAG' Zagreb
	'RC2VUK'	ICRC Vukovar, HRV	PACTOR: 1052 tfc to 'RC2MBO' Zagreb
	'RC2ZAG'	ICRC Zagreb, HRV	PACTOR: 0916-1950 tfc or msgs to 'RC2BAL' Banja Luka or 'RC2KNI' Knin or 'RC2MBO' Zagreb or 'RC2PAL' Pale or 'RC2SAR' Sarajevo or 'RC2SPL' Split or 'RC2VOJ' Vojnic or 'RC2ZEN' Zenica

5169.0	'RC2ZEN'	ICRC Zenica, BIH	PACTOR: 1253 tfc to 'RC2ZAG' Zagreb, 1712 tfc + msg to 'RC2MBO' Zagreb
5170.7	'RC2MBO'	ICRC Zagreb, HRV	PACTOR: 0928 tfc
5175.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 0953 msg (Bulgarian nx)
5180.0	BAA 9	Beijing Meteo, CHN	ITA2 50 Bd: 1230-2305 ry or wx
5180.5	VKA	Adelaide Police, SA, AUS	SSB
5186.0		UNID teleprinter	75
5187.2	'DOR'	MFA Sofia, BUL	IRA 300 Bd: 0916+0951 tfc
5190.0	BZC 75	Ürümqi Meteo, CHN	ITA2 50 Bd: 1617-0222 ry or wx
5196.0		UNID teleprinter	75
5205.0	AAA 3TVW	UNID USA MARS station (696)	Packet Radio: 0435 tfc to AAA 3USA Fort Meade
	AAA 3USA	USA MARS Fort Meade, MD, USA	Packet Radio: 0435 tfc to AAA 3TVW
5208.0	DER 50	Bonn, D	PACTOR: 1257-1450 tfc or operational tfc by DF7WZ Herbert Thamer living near Bonn to DER 54
	DER 54	UNID station (296)	PACTOR: 1257-1450 tfc "hier ist uwe ... ich bring die neue antenne einfach mit nach bonn" to DER 50
		UNID teleprinter	81
5211.0	WGY 9..	many FEMA stations, USA	SSB
		UNID teleprinter	150
5215.0	'HCBSNZE'	UNO Zenica, BIH	SITOR-A: 0757+1706 msgs to 'HCHRVZA' Zagreb
	'HCHRVZA'	UNO Zagreb, HRV	SITOR-A: 0757 tfc to 'HCBSNZE' Zenica, 0836 tfc, 1706 tfc to 'HCBSNZE'
5215.6		UNID teleprinter	150
5217.9		UNID teleprinter	150
5222.0	TYE	ASECNA Cotonou, BEN	ARQ-M2 96 Bd: B: 0530+2230 msg, 2326 tfc [UNA]
5225.0	ZLZ 51	GPO Wellington, NZL	SSB
5227.0	VJJ	RFDS Charlevl., QLD, AUS	SSB
5229.0	GYU	RN Gibraltar, GIB	VFT: ARQ-M2 96 Bd: A: 2158+2323 tfc VFT: ITA2 75 Bd: 1805+2155+2319 encrypted tfc
5229.5		UNID teleprinter	75
5230.0	VJT	RFDS Carnarvon, WA, AUS	SSB
5237.5	NMG	USCG N. Orleans, LA, USA	SSB
5240.0	FDI 8	FAF Nice, F	CW
	YZI 213	TANJUG Belgrade, SRB	ITA2 50 Bd: 2100 E nx
5246.0	AFE 70	USAF Cape Can., FL, USA	SSB

5250.0 - 5450.0 FIXED + MOBILE except aeronautical mobile

5250.0	*BMF*	*T'ai-pei Meteo, TAI*	*FAX // 4616.0 kHz $*
5251.0		UNID teleprinter	200
5253.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1025 encrypted msgs after "DDD..." to Luxembourg, 1311 msg (Romanian nx)
5258.0	*NPN*	*USN Apra Harbour, GUM*	*FAX $*
5260.0	VJK	RFDS Meekath., WA, AUS	SSB
5262.0	*NPN*	*USN Apra Harbour, GUM*	*FAX $*

5262.8	**DER**	**MOI Bonn, I**	**VFT: ARQ-E 96 Bd: 0840-2043 tfc or operational msg to Berlin [BRVHF]**
5264.5	**DER**	**MOI Bonn, I**	**VFT: ARQ-E 96 Bd: 1104-1747 tfc or encrypted msg after "EEE..." to Erfurt [THVHF]**
5265.2	**DER**	**MOI Bonn, I**	**VFT: ARQ-E 72 Bd: 0841-2044 tfc or encrypted msg after "EEE..." to Berlin [GOVHF]**
5269.0	**DHJ 51**	**Grengel Meteo, D**	**ITA2 100 Bd: 0623-1829 wx**
5270.0	ICE	IN Brindisi, I	SSB
	ICN	IN Napoli, I	SSB
	ICS	IN La Spezia, I	SSB
	ICT	IN Taranto, I	SSB
	IDR	IN Rome, I	SSB
	IGJ	IN Augusta, I	SSB
5273.7		**TN Tunis, TUN**	**SITOR-A: 0658 msg** **SITOR-B: 1438 tfc**
5281.3	**SNN 299**	**MFA Warsaw, POL**	**POL-ARQ 100 Bd: 0943+1059+1143+1642 tfc**
5285.0	*RBX 71*	*Tashkent Meteo, UZB*	*FAX // 3280.0 kHz $*
5287.5	**'RETWLA'**	**Guardia Civil Vitoria, E**	**SITOR-A: 1020 msg to 'RETWVB' Burgos**
	'RETWVP'	**Guardia Civil Palencia, E**	**SITOR-A: 1549 msg to 'RETXX' Madrid**
	'RETXX'	**MOI Madrid, E**	**SITOR-A: 1549 tfc to 'RETWVP' Palencia**
5289.0	**'RETXX'**	**MOI Madrid, E**	**SITOR-A: 1015 tfc to 'RETYMA' Avila, 1321 msg to 'RETYMT' Toledo, 1652 msg**
	'RETYMA'	**Guardia Civil Avila, E**	**SITOR-A: 1015 msg to 'RETXX' Madrid**
5291.2		UNID teleprinter	192
5296.0		R Moscow feeder, RUS	SSB
5299.0	**IER 20**	**IFG Rome, I**	**ALIS: 0045+1358+1556+2130 tfc**
5300.0	VJB	RFDS Derby, WA, AUS	SSB
	VJN	RFDS Cairns, QLD, AUS	SSB
		UNID teleprinter	75
5302.0	OLX	Prague, CZE	CW/SSB
5308.0	FAC 20	FA Metz, F	SSB
5308.3		UNID teleprinter	300
5310.0		many NATO st., BIH/HRV	SSB
5312.0	**'DFZG'**	**MFA Belgrade, SRB**	**ITA2 75 Bd: 0500-1448 ry or msg (Serbian press review) or encrypted msg**
		UNID teleprinter	81
5315.0	**BJZ 27**	**Wuhan Meteo, CHN**	**ITA2 75 Bd: 1149-0057 ry or wx**
5317.0	**'DFZG'**	**MFA Belgrade, SRB**	**FEC-A 144 Bd: 1019 encrypted tfc, s. off**
5320.0	NIK	USCG Boston, MA, USA	CW
	NMG	USCG N. Orleans, LA, USA	SSB
5320.5	**'RETWB'**	**Guardia Civil Barcelona, E**	**SITOR-A: 1730 msg**
	'RETXX'	**MOI Madrid, E**	**SITOR-A: 1235 msg to 'RETYMG' Guadalajara**
	'RETYMB'	**Guardia Civil Badajoz, E**	**SITOR-A: 2048 msgs**
	'RETYMC'	**Guardia Civil Caceres, E**	**SITOR-A: 1635 msg to 'RETYMB' Badajoz**
	'RETYMT'	**Guardia Civil Toledo, E**	**SITOR-B: 1622 msg**
	'RETYVA'	**Guardia Civil Alicante, E**	**SITOR-A: 1710 msg**

5320.5	'RETZSO'	Guardia Civil Cordoba, E	SITOR-A: 1705 msg to 'RETZS' Sevilla
5321.5	'RETYMV'	Guardia Civil Cuenca, E	SITOR-A: 1601 + 1752 msg + tfc
	'RETYVC'	Guardia Civil Castellon, E	SITOR-A: 1806 msgs
5325.0	*RCW 75*	*Almaty Meteo, KAZ*	*FAX 60/576: 24 h charts*
5325.5	FDI 8	FAF Nice, F	CW
5327.0		UNID teleprinter	300
5332.1		UNID teleprinter	75
5336.0	'RPFNG'	PN Lisbon, POR	ITA2 75 Bd: 1825 ry
5337.5		UNID teleprinter	125
5340.0	VJD	RFDS Alice Spr., NT, AUS	SSB
		UNID teleprinter	200
5342.0	FDY	FAF Orleans, F	CW
5342.5		UNID teleprinter	125
5346.0	'RETC'	SA Cadiz, E	ITA2 50 Bd: 1941 msgs + tfc to 'RETCJNA' Jerez de la Frontera
	'RETCJNA'	SA Jerez de la Frontera, E	ITA2 50 Bd: 1941 msgs to 'RETC' Cadiz
5347.0	*RSW 71*	*Arkhangelsk Meteo, RUS*	*FAX // 3657.0 kHz*
5350.0	FDE 2	FAF Tours, F	CW
5353.5	'RETWB'	Guardia Civil Barcelona, E	SITOR-A: 0950-1710 tfc or msg to 'RETWBL' Lerida or 'RETWBZ' Zaragoza
	'RETWBG'	Guardia Civil Gerona, E	SITOR-A: 2030 + 2200 msg to 'RETWB' Barcelona
	'RETWBL'	Guardia Civil Lerida, E	SITOR-A: 0844 tfc, 1106 msgs to 'RETWB' Barcelona
	'RETWBT'	Guardia Civil Tarragona, E	SITOR-A: 1000 + 1600 msg
	'RETWBZ'	Guardia Civil Zaragoza, E	SITOR-A: 0950 tfc to 'RETWB' Barcelona
	'RETZSE'	Guardia Civil Melilla, E	SITOR-A: 1200 + 2032 msg
5360.0	VJQ	RFDS Kalgoorlie, WA, AUS	SSB
5362.0	D6Z	ASECNA Moroni, COM	SSB
	5ST	ASECNA Antananar., MDG	SSB
5362.6		UNID station (196)	SITOR-A: 1556 operational tfc "every set of numbers from each crew contained queries or errors", s. off
5365.0	FIS 369	CRS Lyon, F	CW
5367.5	FDY	FAF Orleans, F	ITA2 50 Bd: 0700 + 0804 + 0935 + 1537 + 1552 + 2250 ry
5368.0		UNID teleprinter	75
5370.0	VJD	RFDS Alice Spr., NT, AUS	SSB
		MFA Tunis, TUN	FEC-A 96 Bd: 1440 + 1510 + 1619 + 2100 ATU-A msgs
5372.0		UNID teleprinter	150
5374.5	RND 79	Moscow, RUS	CW
5376.5	OST 23	Oostende R, BEL	SITOR-B: H + 05 tfc list
5377.5	'RETXX'	MOI Madrid, E	SITOR-A: 1435 msg to 'RETWL' Logrono
5381.5	'RETWLG'	Guardia Civil Guipuzcoa, E	SITOR-A: 0925 msg to 'RETXX' Madrid, 2000 msg
	'RETWLN'	Guardia Civil Pamplona, E	SITOR-A: 1730 msg to 'RETWLV' Bilbao
	'RETWN'	Guardia Civil La Coruna, E	SITOR-A: 0849 msg
	'RETXX'	MOI Madrid, E	SITOR-A: 0707 tfc, 0925 tfc to 'RETWLG' Guipuzcoa, 1631 + 1808 tfc
5383.0	ZKCT	NZCD Palmerston N., NZL	SSB
	ZKNT	NZCD Auckland, NZL	SSB

5386.0	ZKCT	NZCD Palmerston N., NZL	SSB
	ZKHQ	NZCD Wellington, NZL	SSB
	ZKNT	NZCD Auckland, NZL	SSB
	ZKST	NZCD Christchurch, NZL	SSB
		UNID teleprinter	ITA2 75 encrypted
5389.0	ZKHQ	NZCD Wellington, NZL	SSB
5391.7		TN Tunis, TUN	SITOR-A: 2000 msg
5397.7	'RFFP'	MOD Paris, F	ARQ-M2 200 Bd: A: 24 h msgs (5lgs) after "BBBB" to 'RFFVAY' Sarajevo [FDXA] B: 24 h AFTN msgs to 'RFFVAY' [FDXB]
5400.0	GYA	RN London, G	ITA2 75 Bd: 1506+1648+2202 clg MTT
	YOG 37	Bucharest Meteo, ROU	ITA2 50 Bd: 0505-1634 ry or wx
		many USACE stations, USA	SSB
5401.0	VLV	TELSTRA Mawson, ATA	SSB
	VLZ	TELSTRA Davis, ATA	SSB
	VNJ	TELSTRA Casey, ATA	SSB
	VNM	TELSTRA Hobart, TAS, AUS	SSB
5405.0	*JMJ 2*	*Tokyo Meteo, J*	*FAX // 3365.0 kHz $*
	MKK	RAF London, G	VFT: ITA2 50 Bd: 0851 ryi
5407.0	ZKST	NZCD Christchurch, NZL	SSB
5410.0	VJD	RFDS Alice Spr., NT, AUS	SSB
5425.0		UNID station (1295)	CIS-14 96 Bd: A/B: 0540 R msgs wca
5426.0		AHE Lyon, F	SSB
		AHE Sarajevo, BIH	SSB
5427.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 1435+1607 msgs
5427.5		UNID teleprinter	75
5430.0	P272 PT	PTC Goroka, PNG	SSB QSX 5805.0 kHz
	RVM 45	Tashkent Meteo, UZB	ITA2 50 Bd: 1441-0453 wx
		ZFDS Ndola, ZMB	SSB
5433.0	SNN 299	MFA Warsaw, POL	POL-ARQ 200 Bd: 0846+1357 tfc, 1538 msgs (5lgs) + msg + tfc to Vienna CW
5436.0		UNID teleprinter	75
5437.0	AFA	USAF Andrews, MD, USA	SSB
5438.0		UNID teleprinter	50
5442.0	ZKX	RNZAF Auckland, NZL	ITA2 75 Bd: 1000 foxes
5445.0	VJI	RFDS Mt. Isa, QLD, AUS	SSB
	VKL	RFDS Port Hedl., WA, AUS	SSB
5445.5		UNID teleprinter	125
5446.5	FDC	FAF Metz, F	CW
	FDG 2	FAF Mont-de-Marsan, F	CW

5450.0 - 5480.0
Region 1 = AERONAUTICAL MOBILE (OR) + FIXED + LAND MOBILE
Region 2 = AERONAUTICAL MOBILE (R)
Region 3 = AERONAUTICAL MOBILE (OR) + FIXED + LAND MOBILE

5451.0		AMS = 10F 11B 12F 12H 13I 13J	SSB
5454.0		AMS = 10 12E 13F 13J	SSB
5455.0	FDE	FAF Villacoublay, F	SSB
5457.0		AMS = 10C 13N	SSB

5457.5		**UNID teleprinter**	**200**
5460.0		**AMS = 10B 10E 12C 13D**	**SSB**
5463.0		**AMS = 11B 13H 13K 13M**	**SSB**
5466.0		**AMS = 10B 13I**	**SSB**
5469.0		**AMS = 11B 13G**	**SSB**
5470.0		**UNID teleprinter**	**75**
5471.6	LN2 A	Beacon Sveio, NOR	CW
5472.0		AMS = 10A 10D 13H	SSB
5473.5	**CSY**	**Santa Maria Air, AZR**	**ITA2 50 Bd: 0405+0910+1955 msgs, 2300 "ch" [MSA]**
5475.0		**AMS = 10A 10D 12E 12F 13G**	**SSB**
5478.5	**HGX 21**	**MFA Budapest, HNG**	**DUP-ARQ: 1126 msg to Belgrade**
		Hungarian E Belgrade, SRB	**DUP-ARQ: 1126 tfc to HGX 21 Budapest**

5480.0 - 5680.0 AERONAUTICAL MOBILE (R) <501 505>

5481.0		AMS = 2A 2C 4B 6G 7D 9C 10C 10E 12E 12J 13E 13F 13K 14D 14G	SSB
5484.0		AMS = 1B 3A 3C 6A 9B 10A 10D 12C 12G 13H	SSB
5487.0		AMS = 2C 6G 10C 12E	SSB
5490.0		AMS = 2A 2B 3A 6D 10A 10D 12C 13C	SSB
5493.0		AMS = AFI, 3B 6G	SSB
5496.0		AMS = 2A 2B 3A 6F 10A 10D 12C 12J 13I	SSB
5499.0		AMS = 3B 6G, VAFI	SSB
5502.0		AMS = 2A 2B 3A 6B 10C 12C 13M	SSB
5505.0		AMS = 3B 6G, VEUR	SSB
5508.0		AMS = 2B 2C 6F 7 9B 11B 12F 13N	SSB
5511.0		AMS = 3A 5B 6G	SSB
5514.0		AMS = 2C 3B 3C 6E 11B 13C	SSB
		UNID teleprinter	**81**
5517.0		AMS = 3A 6G	SSB
5520.0		AMS = CAR, 2B 2C 3B 6D 7E	SSB
5523.0		AMS = 2A 6G 9B 11B 12G 13I	SSB
5526.0		AMS = SAM, 2B 2C 3B 5D 6E 10F 14	SSB
5526.5	*BAF 6*	*Beijing Meteo, CHN*	*FAX $*
5529.0		AMS = W I/II	SSB
5532.0		AMS = W I/V	SSB
5535.0		AMS = W I/IV	SSB
5538.0		AMS = W II/V	SSB
5541.0		AMS = W I/IV	SSB
5544.0		AMS = W II/V	SSB
5547.0		AMS = CEP, 2A 4A 6G 7F 13H 13K	SSB
5550.0		AMS = CAR, 2B 2C 3B 5D 6C 6E 14G	SSB

5553.0		AMS = 6G 10B 13C	SSB
5556.0		AMS = 2 3 12F	SSB
5559.0		AMS = SP, 2A 4A 6G 10E 12G 13J	SSB
5562.0		AMS = 2C 3B 3C 10C 12D 13D	SSB
5565.0		AMS = SAT, 6G 9B 10A	SSB
5568.0		AMS = 1B 3A 3C 5B 6D 7F 10B 12 13J	SSB
5571.0		AMS = 6G 11B 13C	SSB
5574.0		AMS = CEP, 2B 2C 4B 6D 13G	SSB
5577.0		AMS = 1C 5A 6G 7B 10E 13C 13J 13K	SSB
5580.0		AMS = 3A 3B 6A 6C 14G, VCAR	SSB
5583.0		AMS = 1E 5A 5C 6G 7B 9 10B 12E 12F 12H 13E 13F	SSB
5586.0		AMS = 2C 3C 10D	SSB
5589.0		AMS = 12C, VMID	SSB
5592.0		AMS = 6G 7C 9D, VNAT	SSB
5595.0		AMS = 1C 2B 6B 10C 12E	SSB
5598.0		AMS = NAT, 6G	SSB
5601.0		AMS = 3A 3B 6A, VSAM	SSB
5604.0		AMS = 2A 2C 4B 6G 10 12A 12E 12F 13E 13F 13K 14	SSB
5605.0		MA IFOR Sarajevo, BIH	SSB
5607.0		AMS = 2B	SSB
5610.0		AMS = 6G	SSB
5613.0		AMS = 2B 12C	SSB
5614.0		**UNID teleprinter**	**81**
5616.0		AMS = NAT, 6G	SSB
5619.0		AMS = 2B 12J	SSB
5622.0		AMS = 1D 6G	SSB
5625.0		AMS = 3A 5B 6B 10D	SSB
5628.0		AMS = NP, 1D 6G	SSB
5631.0		AMS = 6D 10A	SSB
5634.0		AMS = INO, 6G	SSB
5637.0		AMS = 1D 3C	SSB
5640.0		AMS = 6G	SSB
5643.0		AMS = SP, 3C	SSB
5646.0		AMS = NCA, 12G	SSB
5649.0		AMS = NAT SEA	SSB
5652.0		AMS = AFI CWP	SSB
5655.0		AMS = EA SEA	SSB
5658.0		AMS = AFI MID	SSB
5661.0		AMS = CWP EUR	SSB
5664.0		AMS = NCA	SSB
5667.0		AMS = MID	SSB
5670.0		AMS = EA	SSB
5673.0		AMS = VSEA	SSB
5676.0		AMS = VNCA	SSB

5680.0 - 5730.0 AERONAUTICAL MOBILE (OR) <501 505>

5680.0	WORLDWIDE	CALLING/DISTRESS/SAFETY FREQ.	CW/SSB
5683.0		**UNID teleprinter**	**81**

5684.0		AMS	SSB
	CFH	CF Halifax, NS, CAN	
5685.0	ILI	IAF Brindisi, I	SSB
		IAF Martina Franca, I	SSB
		IAF Monte Venda, I	SSB
		IAF Rome, I	SSB
5686.5	FDG	FAF Bordeaux, F	CW
5687.0		AMS	SSB
	AXF	RAAF Sydney, NSW, AUS	
	AXH	RAAF Townsv., QLD, AUS	
	AXJ	RAAF Perth, WA, AUS	
	DHM 91	GAF Münster, D	
	DHO 23	GAF Landsberg, D	
	ZKX	RNZAF Auckland, NZL	
5688.0	AFE	USAF MacDill, FL, USA	SSB
		UNID teleprinter	**75**
5690.0		AMS	SSB
5691.0		Khabarovsk Air, SE, RUS	SSB
5691.3		**UNID station (896)**	**SITOR-A: 1340 S msg + tfc**
5693.0		AMS	SSB
5696.0		AMS	SSB
	N..	many USCG stations	SSB
5699.0		AMS	SSB
5702.0		AMS	SSB
5705.0		AMS	SSB
	PBV	DAF Valkenburg, NLD	
5705.7	**'RFLI'**	**FF Fort de France, MRT**	**ARQ-E3 96 Bd: 2220-0723 msgs or msg (5lgs) to 'RFLIG' Cayenne [IRT]**
5708.0		AMS	SSB
	'0A'	IAF Dublin, IRL	
5710.0	AFA	USAF Andrews, MD, USA	SSB
	AFE	USAF MacDill, FL, USA	SSB
	CUW	PAF/USAF Lajes AFB, AZR	SSB
5711.0		AMS	SSB
	AFE 70	USAF Cape Can., FL, USA	
5714.0		AMS	SSB
	AJK 33	USAF Aviano, I	
	IGJ	IN Augusta, I	
	MQP	RAF Upavon, G	
5716.5	FDG	FAF Bordeaux, F	CW
5717.0		AMS	SSB
	CFH	CF Halifax, NS, CAN	
	CHR	CF Trenton, ONT, CAN	
	CJX	CF St. John's, NFLD, CAN	
	CJU	CF Vancouver, BC, CAN	
	DHM 91	GAF Münster, D	
	VXA	CF Edmonton, ALTA, CAN	
5720.0		AMS	SSB
5723.0		AMS	SSB
5726.0		AMS	SSB

5730.0 - 5900.0 Region 1 = FIXED + LAND MOBILE
Region 2 = FIXED + MOBILE except aeronautical mobile (R)
Region 3 = FIXED + Mobile except aeronautical mobile (R)

5730.0	BAA 24	Beijing Meteo, CHN	**ITA2 50 Bd: 0029 wx**
5731.0	VZ8 SK	RFDS Katherine, NT, AUS	SSB
	YRR 4	Bucharest Meteo, ROU	**ITA2 50 Bd: 0354-2223 ry or wx**

5731.0	3BZ	Plaisance Air, MAU	SSB
		Pointe Corail Air, ROD	SSB
5734.0		Polish E Bratislava, SVK	POL-ARQ 100 Bd: 1043 msgs + tfc to SNN 299 Warsaw
5734.8		UNID teleprinter	200
5735.8		UNID teleprinter	ITA2 50 encrypted
5738.0	RMP	CISN Kaliningrad, RUS	CW
5746.0	OLZ	MFA Prague, CZE	ITA2 100 Bd: 0710 tfc, 1000 msgs
	P2A 2	PNGDF Port Moresby, PNG	SSB
	P2A 3	PNGDF Lae, PNG	SSB
5748.0		UNID station (1295)	IRA-ARQ 200 Bd: 1000 encrypted tfc, Belgrade and Washington mentioned
5750.0		UNID teleprinter	200
5752.5	HBD 20	MFA Berne, SUI	SITOR-A: 0912+1007+1430+1800 tfc to HBD 64 Bonn
	HBD 64	Swiss E Bonn, D	SITOR-A: 0912+1007 tfc to HBD 20 Berne, 1430 msg to HBD 20, 1800 msg (5lgs) to HBD 20
	'HCBSNBI'	UNO Bihac, BIH	PACTOR: 1915 msg to 'HCHRVZA' Zagreb
	'HCBSNSA'	UNO Sarajevo, BIH	SITOR-A: 0730-1830 tfc to 'HCHRVZA' Zagreb
	'HCBSNTU'	UNO Tuzla, BIH	PACTOR: 0815+0957 tfc
	'HCBSNZE'	UNO Zenica, BIH	PACTOR: 1003 tfc
	'HCHRVME'	UNO Metkovic, HRV	SITOR-A: 0724+1650 msg to 'HCHRVZA' Zagreb
	'HCHRVZA'	UNO Zagreb, HRV	PACTOR: 1915 tfc to 'HCBSNBI' Bihac SITOR-A: 0730-1830 msgs to 'HCBSNBI' Bihac or 'HCBSNSA' Sarajevo or 'HCHRVME' Metkovic
5754.2	'HCBSNBI'	UNO Bihac, BIH	SITOR-A: 0845 msg (E nx) + tfc to 'HCHRVZA' Zagreb
	'HCBSNBL'	UNO Banja Luka, BIH	PACTOR: 0904 tfc + msg to 'HCHRVZA' Zagreb
	'HCHRVZA'	UNO Zagreb, HRV	PACTOR: 0904 msg + tfc to 'HCBSNBL' Banja Luka SITOR-A: 0845 tfc to 'HCBSNBI' Bihac
5755.0	*AXI 32*	*Darwin Meteo, NT, AUS*	*FAX // 2628.0 kHz $*
5757.0	HBD 20	MFA Berne, SUI	SITOR-A: 0700-1752 tfc or msg or msg (5lgs) to HBD 60 Paris
	HBD 60	Swiss E Paris, F	SITOR-A: 0855-1620 tfc or msg (5fgs) to HBD 20 Berne
5758.6		UNID teleprinter	100
5773.0	HBD 20	MFA Berne, SUI	SITOR-A: 0730-1104 tfc or msgs (5lgs) or msg (G nx) to HBD 25 Tel Aviv or HBD 60 Paris
	HBD 25	Swiss E Tel Aviv, ISR	SITOR-A: 0735 msgs (5lgs) to HBD 20 Berne
	HBD 60	Swiss E Paris, F	SITOR-A: 0730 clg HBD 20 Berne
5774.0		Polish E Cologne, D	POL-ARQ 100 Bd: 0907-1302 msgs to SNN 299 Warsaw
5779.0	FVA 80	Rosny sur Bois Gend., F	CW
5781.0		UNID teleprinter	81
5784.0		MOI Sarajevo, BIH	Clover: 1126 tfc to Gorazde
5787.9		UNID teleprinter	150
5790.0		UNID teleprinter	81

5792.6	EAE 220	MFA Madrid, E	SITOR-A: 0949 + 1048 + 1320 tfc
5795.0	FDY	FAF Orleans, F	ITA2 50 Bd: 0627-2055 ry
5796.0		Bou Salem, TUN	ITA2 50 Bd: 1530 ATU-A msgs to Sidi Bouzit
5798.0		IAF Martina Franca, I	SSB
5803.0	FDE 2	FAF Tours, F	CW
	VFA	CCG Inuvik, NWT, CAN	SSB
5804.5	FDC	FAF Metz, F	CW
5807.0	*ZKLF*	*Auckland Meteo, NZL*	*FAX $*
5810.0	HLL 2	Soul Meteo, KOR	CW
5812.5	MKK	RAF London, G	VFT: ITA2 50 Bd: 0723 ryi
5815.0		UNID teleprinter	100
5818.7		UNID FF station (896)	ARQ-E3 192 Bd: 0246 tfc, 0800 "controle de voie"
5820.0	3BT	Vacoas Meteo, MAU	SSB
		Agalega Is. Meteo, MAU	SSB
		Port Mathurin Meteo, ROD	SSB
		Saint Brandon Meteo, MAU	SSB
5825.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 1027 msg (Bulgarian nx), 1028 ry, tfc, 1100 msg (Bulgarian nx)
5826.0	H4C 1	Honiara, SLM	SSB
5831.0	EAE 220	MFA Madrid, E	SITOR-A: 0813 + 0904 + 0939 + 1252 + 1344 tfc
5832.3		UNID teleprinter	300
5835.0		UNID station (296)	CIS-14 96 Bd: A/B: 0022 + 0607 + 2021 R tfc wca
5840.0	'6XM8'	BNDVB Bonn, D	ARQ-E 288 Bd: 1905 + 2040 tfc to 'C37A' MOSSAD Tel Aviv
5842.0		UNID teleprinter	200
5845.0	VNZ	RFDS Pt. Augusta, SA, AUS	SSB
5850.0	*OXT*	*Copenhagen Meteo, DNK*	*FAX $*
	VJB	RFDS Derby, WA, AUS	SSB
5851.0		UNID teleprinter	200
5855.0		UNID teleprinter	200
5856.5	'4X'	UNID station (596)	Coquelet 13: 1330 F tfc + encrypted msg to '3K'
5857.5	*HLL 8*	*Soul Meteo, KOR*	*FAX $*
5865.0	VJN	RFDS Cairns, QLD, AUS	SSB
5867.0	YIL 68	INA Baghdad, IRQ	ITA2 50 Bd: 1600 + 2000 + 2100 A nx
5868.0		UNID station (1195)	IRA-ARQ 200 Bd: 0951 + 1216 encrypted tfc
5869.5	'RETWC'	Guardia Civil La Coruna, E	SITOR-A: 1108 msgs
	'RETWCL'	Guardia Civil Lugo, E	SITOR-A: 1450 msg to 'RETXX' Madrid
	'RETWCP'	Guardia Civil Pontevedra, E	SITOR-A: 1640 msg to 'RETWC' La Coruna
	'RETXX'	MOI Madrid, E	SITOR-A: 1450 tfc to 'RETWCL' Lugo, 1635 msg to 'RETWGC' Gijon
5872.5	'RETXX'	MOI Madrid, E	SITOR-A: 1407 msg to 'RETZSM' Malaga
	'RETZSA'	Guardia Civil Almeria, E	SITOR-A: 1651 msg to 'RETZS' Sevilla
	'RETZSC'	Guardia Civil Cadiz, E	SITOR-A: 1002 msg to 'RETXX' Madrid
	'RETZSG'	Guardia Civil Granada, E	SITOR-A: 1718 msg to 'RETXX' Madrid

5872.5	'RETZSJ'	Guardia Civil Jaen, E	SITOR-A: 1355 msg to 'RETXX' Madrid
	'RETZSL'	Guardia Civil Algeciras, E	SITOR-A: 0735 tfc, 1425 msg to 'RETXX' Madrid
	'RETZSM'	Guardia Civil Malaga, E	SITOR-A: 0907 tfc, 1720 msg
5879.7	'RFFA'	MOD Paris, F	ARQ-E3 192 Bd: 0054-0706 "controle de voie" or tfc or msg to 'RFLI' Fort de France [LFB]
5887.5	IMB 2	Rome Meteo, I	ITA2 50 Bd: 24 h ry or wx
5890.0	*RBV 78*	*Tashkent Meteo, UZB*	*FAX // 3690.0 kHz $*
5895.0	P2.. ..	many CRMF stations, PNG	SSB

5900.0 - 5950.0 BROADCASTING <SSB only, as from 01 April 2007>

Region 1 = FIXED + LAND MOBILE
Region 2 = FIXED + MOBILE except aeronautical mobile (R)
Region 3 = FIXED + Mobile except aeronautical mobile (R)

5904.0	AFS	USAF AWS Om., NE, USA	ITA2 75 Bd: 0016-0447 + 1230 wx
5907.8		UNID teleprinter	75
5908.0	*AFS*	*USAF AWS Om., NE, USA*	*FAX // 3232.0 kHz*
5909.0	BMB	T'ai-pei Meteo, TAI	CW
5912.7	HLL 4	Soul Meteo, KOR	ITA2 50 Bd: 0900 ry, wx; 1230 wx
5915.0	VKC	Melbourne Police, VIC, AUS	SSB
	VKT	Hobart Police, TAS, AUS	SSB

5950.0 - 6200.0 BROADCASTING

6200.0 - 6525.0 MARITIME MOBILE <500A 500B 520 520B 522>

6200.0		ship stations, ch 601	SSB QSX 6501.0 kHz
	T3L 3	MILIPI Tabuaeran, KIR	SSB
	T3L 4	MILIPI Teraina, KIR	SSB
		MILIPI Kiritimati, KIR	SSB
6203.0		ship stations, ch 602	SSB QSX 6504.0 kHz
6206.0		ship stations, ch 603	SSB QSX 6507.0 kHz
6209.0		ship stations, ch 604	SSB QSX 6510.0 kHz
6210.5		UNID teleprinter	ITA2 75 encrypted
6212.0		ship stations, ch 605	SSB QSX 6513.0 kHz
6215.0		ship stations, ch 606 (WORLDWIDE CALLING FREQ.)	SSB QSX 6516.0 kHz
	WORLDWIDE	DISTRESS AND SAFETY FREQ.	SSB
6218.0		ship stations, ch 607	SSB QSX 6519.0 kHz
6220.0		UNID NOBLE oil rig station (196)	SITOR-A: 1800 msg; 2218 msg (daily crew list with E names)
		UNID teleprinter	300
6221.0		ship stations, ch 608	SSB QSX 6522.0 kHz
6223.5		UNID NOBLE oil rig station (596) (off NIG?)	SITOR-A: 0224 + 1953 msg (daily situation report) to Port Harcourt
6224.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB
	ZLM	RNZN Auckland, NZL	SSB
6227.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB
6227.6		UNID teleprinter	100
6230.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB
6234.0		UNID teleprinter	75
6248.0		UNID teleprinter	75

6263.0		ship stations, channel 1	QSX 6314.5 kHz
6263.5		ship stations, channel 2	QSX 6315.0 kHz
6264.0		ship stations, channel 3	QSX 6315.5 kHz
6264.5		ship stations, channel 4	QSX 6316.0 kHz
6265.0		ship stations, channel 5	QSX 6316.5 kHz
6265.5		ship stations, channel 6	QSX 6317.0 kHz
6266.0		ship stations, channel 7	QSX 6317.5 kHz
6266.5		ship stations, channel 8	QSX 6318.0 kHz
6267.0		ship stations, channel 9	QSX 6318.5 kHz
6267.5		ship stations, channel 10	QSX 6319.0 kHz
6268.0	WORLDWIDE	NBDPT DISTRESS AND SAFETY F.	
6268.5		ship stations, channel 12	QSX 6319.5 kHz
6269.0		ship stations, channel 13	QSX 6320.0 kHz
6269.5		ship stations, channel 14	QSX 6320.5 kHz
		ship stations	QSX 6460.0 kHz (SAB 33)
6270.0		ship stations, channel 15	QSX 6321.0 kHz
6270.5		ship stations, channel 16	QSX 6321.5 kHz
6271.0		ship stations, channel 17	QSX 6322.0 kHz
6271.5		ship stations, channel 18	QSX 6322.5 kHz
6272.0		ship stations, channel 19	QSX 6323.0 kHz
6272.5		ship stations, channel 20	QSX 6323.5 kHz
6273.0		ship stations, channel 21	QSX 6324.0 kHz
6273.5		ship stations, channel 22	QSX 6324.5 kHz
6274.0		ship stations, channel 23	QSX 6325.0 kHz
6274.5		ship stations, channel 24	QSX 6325.5 kHz
6275.0		ship stations, channel 25	QSX 6326.0 kHz
6275.5		ship stations, channel 26	QSX 6326.5 kHz
6276.0		ship stations calling, ch 3	CW common channel
6276.5		ship stations calling, ch 4	CW common channel
6277.0		ship stations calling, ch 1	CW group I
6277.5		ship stations calling, ch 2	CW group I
6278.0		ship stations calling, ch 5	CW group II
6278.5		ship stations calling, ch 6	CW group II
6279.0		ship stations calling, ch 7	CW group III
6279.5		ship stations calling, ch 8	CW group III
6280.0		ship stations calling, ch 9	CW group IV
6280.5		ship stations calling, ch 10	CW group IV
6281.0		ship stations, channel 27	QSX 6327.0 kHz
6281.5		ship stations, channel 28	QSX 6327.5 kHz
6282.0		ship stations, channel 29	QSX 6328.0 kHz
6282.5		ship stations, channel 30	QSX 6328.5 kHz
6282.9		UNID teleprinter	150
6283.0		ship stations, channel 31	QSX 6329.0 kHz
6283.5		ship stations, channel 32	QSX 6329.5 kHz
6284.0		ship stations, channel 33	QSX 6330.0 kHz
6284.5		ship stations, channel 34	QSX 6330.5 kHz
6285.0 -		ship stations	CW
- 6300.0		working frequencies	
6288.0	IGJ 43	IN Augusta, I	CW
		UNID teleprinter	ITA2 100 encrypted
6300.5		ship stations, channel 1	non-paired
6301.0		ship stations, channel 2	non-paired
6301.5		ship stations, channel 3	non-paired
		PNA Manila, PHL	SITOR-B: 0730 E nx
6302.0		ship stations, channel 4	non-paired
		ship stations	QSX 6460.0 kHz (SAB 33)
6302.5		ship stations, channel 5	non-paired
6303.0		ship stations, channel 6	non-paired
6303.5		ship stations, channel 7	non-paired
6304.0		ship stations, channel 8	non-paired

6304.5		ship stations, channel 9	non-paired
6305.0		ship stations, channel 10	non-paired
6305.5		ship stations, channel 11	non-paired
6306.0		ship stations, channel 12	non-paired
6306.5		ship stations, channel 13	non-paired
6307.0		ship stations, channel 14	non-paired
6307.5		ship stations, channel 15	non-paired
6308.0		ship stations, channel 16	non-paired
6308.5		ship stations, channel 17	non-paired
6309.0		ship stations, channel 18	non-paired
6309.5		ship stations, channel 19	non-paired
6310.0		ship stations, channel 20	non-paired
6310.5		ship stations, channel 21	non-paired
6311.0		ship stations, channel 22	non-paired
6311.5		ship stations, channel 23	non-paired
6312.0	WORLDWIDE	DSC DISTRESS AND SAFETY F.	
6312.5	WORLDWIDE	SHIP STATIONS DSC FREQUENCY	QSX 6331.0 kHz
6313.0	WORLDWIDE	SHIP STATIONS DSC FREQUENCY	
6313.5	WORLDWIDE	SHIP STATIONS DSC FREQUENCY	
6314.0	WORLDWIDE	NBDPT MSI FREQUENCY	
	NMF	USCG Boston, MA, USA	SITOR-B: 0030 ice report, 0140 wx, 0200 navigational warnings, 1630 wx
6314.5		coast stations, channel 1	QSX 6263.0 kHz
	JFA	*Funabashi F R, J*	*scheduled*
	KFS	San Francisco R, CA, USA	SITOR-B: 1645 wx
	SAB 301	Goeteborg R, S	SITOR-A: 24 h tts
	9MG 14	*Georgetown R, Pin. I., MLA*	*scheduled*
6315.0		coast stations, channel 2	QSX 6263.5 kHz
	CUL	*Lisbon R, POR*	*scheduled*
	GKE 3	Portishead R, G	SITOR-A: 24 h tts SITOR-B: 0930 wx CW
	HPP	*Panama R, PNR*	*scheduled*
	PKX	*Jakarta R, INS*	*scheduled*
	WNU	*Slidell R, LA, USA*	*scheduled*
	ZLA	*Awanui R, NZL*	*scheduled*
	9GX	*Tema R, GHA*	*scheduled*
6315.5		coast stations, channel 3	QSX 6264.0 kHz
	KFS	San Francisco R, CA, USA	SITOR-A: 1805-0904 tts CW
	SPA 31	Gdynia R, POL	SITOR-A: 2031 + 2050 + 2150 tts SITOR-B: 1900 tfc list CW
	USU	Mariupol R, UKR	SITOR-A: 1253-0030 R tts wtsca SITOR-B: 0430 tfc list CW
	XSV	*Tianjin R, CHN*	*scheduled*
6316.0		coast stations, channel 4	QSX 6264.5 kHz
	IAR	*Rome R, I*	*scheduled*
	LSD 836	Buenos Aires R, ARG	SITOR-B: 0630 tfc list
	NMN	USCG Portsmouth, VA, USA	SITOR-A: 2307-0816 tts CW
	PKD	*Surabaya R, INS*	*scheduled*
	UBE	*Petropavl.-Km. R, FE, RUS*	*scheduled*
	UFN	Novorossiysk R, RUS	SITOR-A: 0030 + 0227 + 0700 + 2059 R tts wtsca CW
	WLC	Rogers City R, MI, USA	SITOR-B: 1330 + 1400 wx
	YLQ	*Riga R, LVA*	*scheduled*

6316.0	*ZLA*	*Awanui R, NZL*	*scheduled*
6316.5		coast stations, channel 5	QSX 6265.0 kHz
	D4A	*Mindelo R, S. Vicente, CPV*	*scheduled*
	SPB 31	*Szczecin R, POL*	*scheduled*
	UGH	*Provideniya R, FE, RUS*	*scheduled*
	5RS	*Toamasina R, MDG*	*scheduled*
	7TK 22	Boufarik R, ALG	SITOR-A: 1010 tts
6317.0		coast stations, channel 6	QSX 6265.5 kHz
	OFA	*Helsinki R, FIN*	*scheduled*
	UCE	Arkhangelsk R, RUS	SITOR-A: 1622-0151 R tts wtsca CW
	UUI	Odessa R, UKR	SITOR-A: 1819-0306 R tts wtsca CW
	WLO	Mobile R, AL, USA	SITOR-A: 2225-1039 tts CW
	9WH 20	*K. Kinabalu R, Sb., MLA*	*scheduled*
6317.5		coast stations, channel 7	QSX 6266.0 kHz
	NOJ	USCG Kodiak, ALS	SITOR-A: 24 h tts CW
	WAH	*Saint Thomas R, VIR*	*scheduled*
	XSG	*Shanghai R, CHN*	*scheduled*
	3AC 26	*Monte Carlo R, MCO*	*scheduled*
6318.0		coast stations, channel 8	QSX 6266.5 kHz
	IDR 3	IN Rome, I	ITA2 75 Bd: 1517 channel status
	KLB	Seattle R, WA, USA	SITOR-A: 0940 + 0948 tts SITOR-B: 0130 tfc list CW
	LGU 2	Rogaland R, NOR	SITOR-A: 24 h tts CW
	UFL	Vladivostok R, SE, RUS	SITOR-A: 1039 + 1426 + 1431 R tts wtsca CW
	USU	*Mariupol R, UKR*	*scheduled*
6318.5		coast stations, channel 9	QSX 6267.0 kHz
	CBV	*Valparaiso R, CHL*	*scheduled*
	HZG	*Dammam R, ARS*	*scheduled*
	OXZ	Lyngby R, DNK	SITOR-A: 24 h tts SITOR-B: 0560 + 1130 + 1930 tfc list CW
	SPA 32	*Gdynia R, POL*	*scheduled*
	UFL	*Vladivostok R, SE, RUS*	*scheduled*
	VAI	*CCG Vancouver, BC, CAN*	*scheduled*
	9MG 14	*Georgetown R, Pin. I., MLA*	*scheduled*
6319.0		coast stations, channel 10	QSX 6267.5 kHz
	D4A	*Mindelo R, S. Vicente, CPV*	*scheduled*
	EAD	Madrid R, E	SITOR-B: 0100 + 0300 + 0500 + 0700 + 0900 + 1100 + 1300 + 1500 + 1700 + 1900 + 2100 + 2300 tfc list
	IAR	*Rome R, I*	*scheduled*
	UFC	Nakhodka R, SE, RUS	SITOR-A: 0025 R tts wtsca
	UUI	Odessa R, UKR	SITOR-A: 2049 R tts wtsca
	WLO	Mobile R, AL, USA	SITOR-A: 2227-0903 tts CW
	YLQ	*Riga R, LVA*	*scheduled*
	9AR	*Rijeka R, HRV*	*scheduled*
6319.5		coast stations, channel 12	QSX 6268.5 kHz
	GKP 3	Portishead R, G	SITOR-A: 24 h tts CW

6320.0		coast stations, channel 13	QSX 6269.0 kHz
	DAN	Norddeich R, D	SITOR-A: 2035-0641 tts CW
	KPH	San Francisco R, CA, USA	SITOR-A: 0251+0316+1039+1346 tts SITOR-B: 0100+0300 tfc list; 0500 tfc list, wx; 0700+0900+1100+1300+1500+1700 tfc list; 1900 tfc list, wx; 2100+2300 tfc list CW
	WCC	*Chatham R, MA, USA*	*scheduled*
	9VG	Singapore R, SNG	SITOR-A: 0952+1426+1521 tts CW
	9WW 20	*Kuching R, Sarawak, MLA*	*scheduled*
6320.5		coast stations, channel 14	QSX 6269.5 kHz
	FFT 31	Saint Lys R, F	SITOR-A: 24 h tts SITOR-B: 0300+0500 tfc list, 0900 navigational warnings, wx; 1000 wx, 1500 tfc list, 1700 wx, 1800 navigational warnings, wx; 1900+2100+2200 wx CW
	JNA	*JN Tokyo, J*	*scheduled*
	KPH	*San Francisco R, CA, USA*	*scheduled*
	LSD 836	*Buenos Aires R, ARG*	*scheduled*
	SVT 3	*Athens R, GRC*	*scheduled*
	UTQ	*Kiyev R, UKR*	*scheduled*
	WCC	*Chatham R, MA, USA*	*scheduled*
	3AC 36	*Monte Carlo R, MCO*	*scheduled*
6321.0		coast stations, channel 15	QSX 6270.0 kHz
	IAR	*Rome R, I*	*scheduled*
	LZW 32	*Varna R, BUL*	*scheduled*
	OXZ	*Lyngby R, DNK*	*scheduled*
	WLO	Mobile R, AL, USA	SITOR-A: 2228-1310 tts CW
	9AR	*Rijeka R, HRV*	*scheduled*
6321.5		coast stations, channel 16	QSX 6270.5 kHz
	GKL 3	*Portishead R, G*	*scheduled*
	SPB 32	*Szczecin R, POL*	*scheduled*
	SVU 3	Athens R, GRC	SITOR-A: 1754-2229 tts SITOR-B: 2100 msg CW
6322.0		coast stations, channel 17	QSX 6271.0 kHz
	OST 37	Oostende R, BEL	SITOR-A: 24 h tts CW
	XSQ	*Guangzhou R, CHN*	*scheduled*
	ZSD	Durban R, AFS	SITOR-A: 0107+0312+2336 tts SITOR-B: 2030+2230 tfc list CW
6322.5		coast stations, channel 18	QSX 6271.5 kHz
	IAR	*Rome R, I*	*scheduled*
	JFA	*Funabashi F R, J*	*scheduled*
	LSD 836	*Buenos Aires R, ARG*	*scheduled*
	LZR	*Ruse R, BUL*	*scheduled*
	VRX	Victoria Harbour R, HKG	SITOR-A: 1042-2230 tts CW
	9WW 20	*Kuching R, Sarawak, MLA*	*scheduled*
6323.0		coast stations, channel 19	QSX 6272.0 kHz
	CNP	*Casablanca R, MRC*	*scheduled*

6323.0	*FFT 32*	*Saint Lys R, F*	*scheduled*
	SAB 319	Goeteborg R, S	SITOR-A: 24 h tts
	WLO	Mobile R, AL, USA	SITOR-A: 0902+1141+2248-0527 tts CW
6323.5		coast stations, channel 20	QSX 6272.5 kHz
	9VG 77	Singapore R, SNG	SITOR-A: 0826-2323 tts SITOR-B: 0030 wx, 0130+0330+0530+0730+0930+1130 tfc list, 1230 wx, 1330+1530 tfc list CW
6324.0		coast stations, channel 21	QSX 6273.0 kHz
	GKQ 3	*Portishead R, G*	*scheduled*
	KPH	San Francisco R, CA, USA	SITOR-A: 1041 tts CW
	WCC	Chatham R, MA, USA	SITOR-A: 2010-0901 tts SITOR-B: 0040+0240 tfc list; 0440 tfc list, wx; 0640+0840+1040 tfc list; 1240 tfc list, wx; 1440 tfc list; 1640 tfc list, wx; 1840+2040+2240 tfc list CW
	9WH 20	*K. Kinabalu R, Sb., MLA*	*scheduled*
6324.5		coast stations, channel 22	QSX 6273.5 kHz
	KPH	San Francisco R, CA, USA	SITOR-A: 0251-1544 tts CW
6325.0		coast stations, channel 23	QSX 6274.0 kHz
	CNP	*Casablanca R, MRC*	*scheduled*
	EAD	Madrid R, E	SITOR-B: 0100+0300+0500+0700+0900+1100+1300+1500+1700+1900+2100+2300 tfc list
	JOS	*Nagasaki R, J*	*scheduled*
	UHS	*Murmansk R, RUS*	*scheduled*
	YLQ	Riga R, LVA	SITOR-A: 24 h R tts wtsca CW
	9AR	*Rijeka R, HRV*	*scheduled*
6325.5		coast stations, channel 24	QSX 6274.5 kHz
	LZW 33	*Varna R, BUL*	*scheduled*
	SVS 3	*Athens R, GRC*	*scheduled*
	TAH	*Istanbul R, TUR*	*scheduled*
	UGC	Saint Petersburg R, RUS	SITOR-A: 0314-1825 R tts wtsca CW
	UQB	*Kholmsk R, FE, RUS*	*scheduled*
	WLO	Mobile R, AL, USA	SITOR-A: 2230-1041 tts SITOR-B: 0100 wx CW
	7TK 23	*Boufarik R, ALG*	*scheduled*
6326.0		coast stations, channel 25	QSX 6275.0 kHz
	KEJ	Hoolehua R, HWA	SITOR-B: H+15 tfc list CW
	XSG	Shanghai R, CHN	SITOR-A: 2231+2323 tts CW
6326.5		coast stations, channel 26	QSX 6275.5 kHz
	SAB 326	Goeteborg R, S	SITOR-A: 0533+1321+2140+2231 tts SITOR-B: 1335 schedule, tfc list CW
	USU	Mariupol R, UKR	SITOR-A: 24 h R tts wtsca CW

6327.0		coast stations, channel 27	QSX 6281.0 kHz
	LPD	*General Pacheco R, ARG*	*scheduled*
	VCT	*Tors Cove R, NFLD, CAN*	*scheduled*
	WNU	Slidell R, LA, USA	SITOR-A: 0028+0314+0500+1041+1241+2327 tts CW
6327.5		coast stations, channel 28	QSX 6281.5 kHz
	UAT	Moscow R, RUS	SITOR-A: 1936-0120 R tts wtsca CW
	YLQ	*Riga R, LVA*	*scheduled*
6328.0		coast stations, channel 29	QSX 6282.0 kHz
	LPD	*General Pacheco R, ARG*	*scheduled*
	LZR	*Ruse R, BUL*	*scheduled*
	VCT	*Tors Cove R, NFLD, CAN*	*scheduled*
6328.5		coast stations, channel 30	QSX 6282.5 kHz
6329.0		coast stations, channel 31	QSX 6283.0 kHz
	TAH	*Istanbul R, TUR*	*scheduled*
	4PB	*Colombo R, SLK*	*scheduled*
6329.5		coast stations, channel 32	QSX 6283.5 kHz
	VCT	Tors Cove R, NFLD, CAN	SITOR-A: 2005-0818 tts SITOR-B: 0200 tfc list, 0451 wx, 0515 tfc list, 1051+1651 wx, 2000 tfc list, 2251 wx CW
6330.0		coast stations, channel 33	QSX 6284.0 kHz
	LZW 34	Varna R, BUL	SITOR-A: 24 h tts CW
	XSG	*Shanghai R, CHN*	*scheduled*
6330.5		coast stations, channel 34	QSX 6284.5 kHz
6331.0	WORLDWIDE	COAST STATIONS DSC FREQUENCY	QSX 6312.5 kHz
6331.5	WORLDWIDE	COAST STATIONS DSC FREQUENCY	
6332.0	WORLDWIDE	COAST STATIONS DSC FREQUENCY	
6333.5	IGJ	IN Augusta, I	ITA2 100 Bd: 24 h channel status
	WCC	Chatham R, MA, USA	CW
	XSZ	Dalian R, CHN	CW
6334.5	UFM	Nevelsk R, FE, RUS	CW
6335.5	DZI	Bacoor R, PHL	CW
	IGJ 43	IN Augusta, I	CW
	VFF	CCG Iqaluit, NWT, CAN	CW
6336.0	LZW 36	Varna R, BUL	CW
6336.3	**GYA**	**RN London, G**	**ITA2 75 Bd: 2055+2233+2305 channel status**
	MGJ	**RN Faslane, G**	**ITA2 75 Bd: 0943+1641 channel status**
6337.0	CBV	Valparaiso R, CHL	CW
	EDG 2	Madrid R, E	CW
	LZW 37	Varna R, BUL	CW
	PKG	Banjarmasin R, INS	CW
	PKP	Dumai R, INS	CW
	UCE	**Arkhangelsk R, RUS**	**ITA2 50 Bd: 1434 R tts wtsca** CW
	WCC	Chatham R, MA, USA	CW
6338.6		**Berlin, D**	**VFT: ARQ-E 72 Bd: 0820+1008+1109 tfc to DER Bonn, 1522 msg to DER [HFVGO]**
6339.5	ZLO 3	RNZN Auckland, NZL	CW
6340.5	E3C	Assab R, ERI	CW
	NMF	*USCG Boston, MA, USA*	*FAX $*
	9VG 9	Singapore R, SNG	CW
6341.5	UNI	Ventspils R, LVA	CW

6341.5	UUI	Odessa R, UKR	CW
	YLQ	**Riga R, LVA**	**ITA2 50 Bd: 1013-2138 R tts wtsca or wx**
			CW
6342.0	LZL 3	Bourgas R, BUL	CW
6342.6	SUH 7	Alexandria R, EGY	CW
6344.0	SVB 3	Athens R, GRC	CW
	WLO	**Mobile R, AL, USA**	**SITOR-B: H+35 tfc list, wx**
			CW
	YJM 6	Port-Vila R, Efate I., VUT	CW
6345.0	UCY	Astrakhan' R, RUS	CW
6347.0	PPL	Belem R, B	CW
6347.5	PKN 6	Samarinda R, INS	CW
6348.0	**HWN**	**FN Paris, F**	**ITA2 150 Bd: 24 h ry**
	J2A 6	Jibuti R, DJI	CW
	KFS	San Francisco R, CA, USA	CW
	5RS	Toamasina R, MDG	CW
6349.0	PPJ	Juncao R, B	CW
6350.0	XFK	La Paz R, MEX	CW
6351.0	OBF	Mollendo R, PRU	CW
6351.5	P2M	Port Moresby R, PNG	CW
	VFA	CCG Inuvik, NWT, CAN	CW
	YVG	La Guaira R, VEN	CW
6352.0	PPL	Belem R, B	CW
6353.0	**UUI**	**Odessa R, UKR**	**ITA2 50 Bd: 1540 R tts wtsca**
			CW
6354.0	UGC	Saint Petersburg R, RUS	CW
	XFM	Manzanillo R, MEX	CW
6355.0	EQL	Anzali R, IRN	CW
	EQO	Nowshahr R, IRN	CW
	OFJ 6	Helsinki R, FIN	CW
	PKC 4	Panjang R, INS	CW
	PKP 2	Teluk Bayur R, INS	CW
	PKS	Pontianak R, INS	CW
	PZN 2	Paramaribo R, SUR	CW
	USU	**Mariupol R, UKR**	**ITA2 50 Bd: 0908+1825 R tts wtsca**
			CW
6355.9	9MG 10	Georgetown R, Pin. I., MLA	CW
6357.0	SAA	Karlskrona R, S	CW
6357.1		**UNID teleprinter**	**200**
6358.0	XFN	Progreso R, MEX	CW
6358.5	**PBC 36**	**DN Goeree Island, NLD**	**ITA2 75 Bd: 24 h ry**
6360.0	OBC	Callao R, PRU	CW
	RSBM	Saint Petersburg R, RUS	CW
	UHK	Batumi R, GEO	CW
	XFQ	Salina Cruz R, MEX	CW
6361.0	KUQ	Pago Pago R, SMA	CW
		UNID teleprinter	100
6361.4		**UNID teleprinter**	**75**
6362.0	**MGJ**	**RN Faslane, G**	**ITA2 75 Bd: 0535+1324 channel status**
6364.0		**UNID teleprinter**	**ITA2 100 encrypted**
6364.5	HZG	Dammam R, ARS	CW
6365.0	IRM	CIRM Rome, I	CW
	UVD	Magadan R, FE, RUS	CW
	VTH	**IN Mumbai, IND**	**ITA2 50 Bd: 2238 ry**
6365.5	KFS	San Francisco R, CA, USA	CW
6367.0	XFU	Veracruz R, MEX	CW
6368.5	YLQ	Riga R, LVA	CW

6369.0	D3E 41	Luanda R, AGL	CW
	XST	Qingdao R, CHN	CW
6370.0	UBE	Petropavl.-Km. R, FE, RUS	CW
	UGC	**Saint Petersburg R, RUS**	**SITOR-A: 0235 + 2200 R tts wtsca** CW
	UTM	Feodosiya R, UKR	CW
	VBA	CCG Th. Bay, ONT, CAN	CW
	XSD	Yingkou R, CHN	CW
	XSH	Basuo R, CHN	CW
6371.0	**GYU**	**RN Gibraltar, GIB**	**ITA2 75 Bd: 24 h foxes**
	PPO	Olinda R, B	CW
6371.5	A3A	Nuku'alofa R, TON	CW
	RKLM	Arkhangelsk R, RUS	CW
6372.0	CBV	Valparaiso R, CHL	CW
	9WW 20	Kuching R, Sarawak, MLA	CW
6374.0	PPJ	Juncao R, B	CW
6375.0	LYL	Klaipeda R, LTU	CW
	PWZ	BN Rio de Janeiro, B	CW
	TBO	TN Izmir, TUR	CW
6376.0	C6N	Nassau R, BAH	CW
	SPE 32	Szczecin R, POL	CW
	WCC	Chatham R, MA, USA	CW
6377.0	PPO	Olinda R, B	CW
6379.0	4XZ	IN Haifa, ISR	CW
6379.5	CBV	Valparaiso R, CHL	CW
	XSK	Beihai R, CHN	CW
	ZSC 21	Cape Town R, AFS	CW
	8PO	Bridgetown R, BRB	CW
6380.0	UCW	Saint Petersburg R, RUS	CW
	UQB	Kholmsk R, FE, RUS	CW
6381.0	9KK 4	Safat R, KWT	CW
6382.0	TBA 6	TN Ankara, TUR	CW
6382.2	EAD 2	Madrid R, E	CW
6383.0	SPH 31	Gdynia R, POL	CW
	TYA	Cotonou R, BEN	CW
	URL	Sevastopol' R, UKR	CW
	XSN	Ningbo R, CHN	CW
	3XC 2	Conakry R, GUI	CW
	6VA 4	Dakar R, SEN	CW
6384.0		**UNID teleprinter**	**75**
6384.5	**CKN**	**CF Victoria, BC, CAN**	**ITA2 75 Bd: 0403 ry, 1330 msg**
6385.0	FUO	FN Toulon, F	CW
	PPR	Rio de Janeiro R, B	CW
	SXA 35	GN Piraeus, GRC	CW
	UFL	Vladivostok R, SE, RUS	CW
6386.5	HKC	Buenaventura R, CLM	CW
	USO	Izmail R, UKR	CW
	VTF 3	IN Mumbai, IND	CW
	VTO 3	IN Vishakhapatnam, IND	CW
	YLQ	Riga R, LVA	CW
6387.0	HZG	Dammam R, ARS	CW
6387.4	7TF 4	Boufarik R, ALG	CW
6388.0	**EBA**	**SN Madrid, E**	**ITA2 75 Bd: 1005 + 1700 + 1745 + 1956 msg (navigational warnings)** CW
6389.0	CTP	NATO Lisbon, POR	CW
6389.7	WNU	Slidell R, LA, USA	CW
6390.0	AQP 4	PN Karachi, PAK	CW
	IDQ	IN Rome, I	CW
	UGH	Provideniya R, FE, RUS	CW

6390.0	UIS	Tuapse R, RUS	CW
	XFC	Cozumel R, MEX	CW
	XFE	Ensenada R, MEX	CW
	XSQ	Guangzhou R, CHN	CW
	ZPK	Asuncion R, PRG	CW
6390.3		**UNID teleprinter**	**100**
6391.0	PPR	Rio de Janeiro R, B	CW
6392.4	ZAD 2	Durres R, ALB	CW
	ZAS	Sarande R, ALB	CW
6393.0	CBV	Valparaiso R, CHL	CW
	DZW	Manila R, PHL	CW
	VHI 3	RAN Darwin, NT, AUS	CW
6393.5	**UDK**	**Murmansk R, RUS**	**ITA2 50 Bd: 0630 ry, schedule**
			CW
6395.0	TBA 3	TN Ankara, TUR	CW
	4PB	Colombo R, SLK	CW
	'RTQGLDB'	**UNID station (896)**	**ITA2 75 Bd: 1620 Turkish wx "fm meteor to umuma" to 'RTQGDBCY'**
6397.0	**FUX**	**FN Le Port, REU**	**ITA2 75 Bd: 1900 + 2144 + 2240 ry**
	JMC 3	Tokyo Meteo, J	CW
	ZPK	Asuncion R, PRG	CW
6398.0	SPH 32	Gdynia R, POL	CW
6400.0	UHS	Murmansk R, RUS	CW
	UON	Baku R, AZE	CW
6400.5	EDZ 2	Madrid R, E	CW
	XSR	Haikou R, CHN	CW
6402.0	DZE	Mandaluyong R, PHL	CW
		UNID teleprinter	**100**
6402.6	7TA 2	El Djaza'ir R, ALG	CW
6404.0	LPD 44	General Pacheco R, ARG	CW
6405.0	ESA	Tallinn R, EST	CW
	LZW 38	Varna R, BUL	CW
	UFH	Petropavl.-Km. R, FE, RUS	CW
	UIS	Tuapse R, RUS	CW
	YLQ	Riga R, LVA	CW
6407.0	UAI	Nakhodka R, SE, RUS	CW
6407.5	CBV	Valparaiso R, CHL	CW
	XSL	Fuzhou R, CHN	CW
6408.0	DZA	Mandaluyong R, PHL	CW
6408.5	EBA	SN Madrid, E	CW
6409.0		**UNID teleprinter**	**75**
6409.5	IAR	Rome R, I	CW
	SUZ	Serapeum R, EGY	CW
6410.0	UHK	Batumi R, GEO	CW
6410.7	KLB	Seattle R, WA, USA	CW
6411.0	DZF	Bacoor R, PHL	CW
	SVF 3	Athens R, GRC	CW
	5OW 6	Lagos R, NIG	CW
	9LL	Freetown R, SRL	CW
6412.0	9VG 55	Singapore R, SNG	CW
6414.0	CBV	Valparaiso R, CHL	CW
6414.5	ASK	Karachi R, PAK	CW
	XFA	Acapulco R, MEX	CW
	XSG	Shanghai R, CHN	CW
6415.0	RPLT	Tuapse R, RUS	CW
	7TF 4	Boufarik R, ALG	CW
6415.5	URM	Odessa R, UKR	CW
6416.0	SXA	GN Piraeus, GRC	CW

6416.0	**WLO**	**Mobile R, AL, USA**	**SITOR-B: H+35 tfc list, wx** CW
6417.0	DZP	Novaliches R, PHL	CW
6418.0	IAR	Rome R, I	CW
	VTP 5	IN Vishakhapatnam, IND	CW
6419.0	**CCS**	**CN Santiago, CHL**	**ITA2 100 Bd: 1000 tfc**
6420.0	PWZ	BN Rio de Janeiro, B	CW
	UAD	Kholmsk R, FE, RUS	CW
	UNR	Severo-Kuril'sk R, FE, RUS	CW
	UON	Baku R, AZE	CW
	UTQ	Kiyev R, UKR	CW
6421.5	FFL 3	Saint Lys R, F	CW
	9AR	Rijeka R, HRV	CW
6423.0	LZL 3	Bourgas R, BUL	CW
6423.5	HPP	Panama R, PNR	CW
6425.0	EQM	Bushire R, IRN	CW
	SUP	Port Said R, EGY	CW
	UGC	Saint Petersburg R, RUS	CW
6427.0	LYK	Klaipeda R, LTU	CW
6428.0	CBV	Valparaiso R, CHL	CW
6428.5	PKM	Bitung R, INS	CW
	VIX 3	RAN Canberra, ACT, AUS	CW
	XSU	Yantai R, CHN	CW
6430.0	ESP	Pärnu R, EST	CW
	UFZ	**Vladivostok R, SE, RUS**	**ITA2 50 Bd: 1432 R tts wtsca** CW
	UKJ	Astrakhan' R, RUS	CW
		UNID teleprinter	**75**
6430.4	5RS	Toamasina R, MDG	CW
6432.0	DZZ	Manila R, PHL	CW
	LGU	Rogaland R, NOR	CW
	UAI	Nakhodka R, SE, RUS	CW
	USI	Kherson R, UKR	CW
6434.4		**RN Preston, G**	**ITA2 100 Bd: 24 h ry or encrypted tfc**
6435.0	DZO	Bulacan R, PHL	CW
	PWZ	BN Rio de Janeiro, B	CW
	XFB	Ciudad del Carmen R, MEX	CW
	XFY	Guaymas R, MEX	CW
6435.5	CWA	Cerrito R, URG	CW
	MTI	**RN Plymouth, G**	**ITA2 75 Bd: 0536+1622-2241 channel status**
	XSI	Sanya R, CHN	CW
	XSK 4	Haimen R, CHN	CW
6436.0	**GYA**	**RN London, G**	**ITA2 75 Bd: 2025 clg MTT**
	OBY	Paita R, PRU	CW
6436.5	TAH	Istanbul R, TUR	CW
6436.8	ZLP 3	RNZN Auckland, NZL	CW
6438.0	VFR	CCG Resolute, NWT, CAN	CW
6439.0	**LYK**	**Klaipeda R, LTU**	**ITA2 50 Bd: 1054 R tts wtsca, 1910 navigational warnings, 2001+2012 R tts wtsca**
	XFP	Chetumal R, MEX	CW
6439.5	**UDK**	**Murmansk R, RUS**	**ITA2 50 Bd: 1533 R tts wtsca** CW
6440.0	OLP	Prague R, CZE	CW
6442.0	XSE	Qinhuangdao R, CHN	CW
6442.5		**UNID teleprinter**	**75**
6443.5	7TF 4	Boufarik R, ALG	CW
6444.5	SVD 3	Athens R, GRC	CW

6445.0	UFL	Vladivostok R, SE, RUS	CW
6446.5	WLO	Mobile R, AL, USA	CW
6446.8	OXZ 3	Lyngby R, DNK	CW
6447.0	UUI	Odessa R, UKR	CW
6448.0	LZW 39	Varna R, BUL	CW
6449.0	9WH 20	K. Kinabalu R, Sb., MLA	CW
6449.5	XSO	Wenzhou R, CHN	CW
		UNID teleprinter	**100**
6451.0	HLG	Soul R, KOR	CW
6452.0	XSG	Shanghai R, CHN	CW
	9WW 20	Kuching R, Sarawak, MLA	CW
6452.5	*GYA*	*RN London, G*	*FAX // 3652.0 kHz $*
6453.0	*NPG*	*USN San Franc., CA, USA*	*FAX // 4855.0 kHz $*
6454.0	XSG	Shanghai R, CHN	CW
6454.6		**UNID teleprinter**	**100**
6455.0	UDK	Murmansk R, RUS	CW
6456.0	**CKN**	**CF Victoria, BC, CAN**	**ITA2 75 Bd: 0630+0930+1000+1100 wx**
			FAX // 2754.0 kHz $
	HCG	Guayaquil R, EQA	CW
6457.0	XSP	Shantou R, CHN	CW
6457.5	JOR	Nagasaki R, J	CW
6458.0	XSM	Xiamen R, CHN	CW
6459.0	SPE 31	Szczecin R, POL	CW
6460.0	**SAB 33**	**Goeteborg R, S**	**SITOR-A: 24 h tts; QSX 6302.0 kHz**
	UFZ	**Vladivostok R, SE, RUS**	**ITA2 50 Bd: 0021+0810-1530 R tts wtsca**
6461.0	XSQ	Guangzhou R, CHN	CW
6462.0	**FUM**	**FN Papeete, Tahiti, OCE**	**ITA2 75 Bd: 0521-1352+2200 ry**
		UNID teleprinter	**150**
6463.5	HKB	Barranquilla R, CLM	CW
	XSP	Shantou R, CHN	CW
6465.0	DYP	Cebu R, PHL	CW
	UIW	Kaliningrad R, RUS	CW
	UWS	Kiyev R, UKR	CW
6465.5	ROD	Murmansk R, RUS	CW
6466.0	HZG	Dammam R, ARS	CW
		UNID teleprinter	**MFSK**
6467.0	CBV	Valparaiso R, CHL	CW
	JCS	Choshi R, J	CW
	VTG 5	IN Mumbai, IND	CW
6468.0	DZN	Navotas R, PHL	CW
6469.0	UFJ	Rostov-na-Donu R, RUS	CW
6470.0	JCX	Naha R, J	CW
	SXA 24	GN Piraeus, GRC	CW
	UCE	Arkhangelsk R, RUS	CW
	UIF	Anadyr' R, FE, RUS	CW
6470.5	6YI	Kingston R, JMC	CW
	9MG 10	Georgetown R, Pin. I., MLA	CW
	9YL	North Post R, TRD	CW
6472.0		**UNID teleprinter**	**200**
6473.5	YQI 3	Constanta R, ROU	CW
6474.0	DYV	Iloilo R, PHL	CW
	OBC	Callao R, PRU	CW
	OBF	Mollendo R, PRU	CW
	OBQ	Iquitos R, PRU	CW
	OBY	Paita R, PRU	CW
	XSJ	Zhanjiang R, CHN	CW
6475.0	ESP	Pärnu R, EST	CW

6475.0	LYK	Klaipeda R, LTU	ITA2 50 Bd: 0930-1813 R tts wtsca CW
	'HCBG'	UNO Gorazde, BIH	SITOR-A: 0831 tfc, 1236 tfc + msg, 1253 + 1415 tfc
	'HCBSNBA'	UNO Banja Luka, BIH	PACTOR: 0959 tfc, 1033 tfc + msg to 'HCYUGBE' Belgrade, 1628 tfc
	'HCBSNBI'	UNO Bihac, BIH	PACTOR: 0840-1652 tfc or msg to 'HCYUGBE' Belgrade
	'HCBSNME'	UNO Medna, BIH	PACTOR: 1025 tfc
	'HCBSNMO'	UNO Mostar, BIH	PACTOR: 1132 + 1641 tfc
	'HCBSNPA'	UNO Pale, BIH	PACTOR: 0834 tfc, 0930 msg, 1449 tfc
	'HCBSNSA'	UNO Sarajevo, BIH	PACTOR: 0936-1820 tfc to 'HCHRVME' Metkovic or 'HCSWIGE' Geneva
	'HCBSNTU'	UNO Tuzla, BIH	PACTOR: 0933 + 0950 tfc to 'HCHRVZA' Zagreb, 0958 + 1004 tfc
	'HCBSNZE'	UNO Zenica, BIH	PACTOR: 0841-1340 tfc or msg to 'HCYUGBE' Belgrade
	'HCHRVME'	UNO Metkovic, HRV	PACTOR: 1339 tfc, 1443 msgs to 'HCBSNSA' Sarajevo
	'HCHRVZA'	UNO Zagreb, HRV	PACTOR: 0740-1656 tfc or msgs to 'HCBSNTU' Tuzla or 'HCSWIGE' Geneva or 'HCYUGBE' Belgrade
	'HCHZ'	UNO Zagreb, HRV	SITOR-A: 1311 tfc + msg to 'HCKR' Pristina, 1420 msgs
	'HCKR'	UNO Pristina, SRB	SITOR-A: 1311 tfc to 'HCHZ' Zagreb
	'HCMP'	UNO Podgorica, SRB	SITOR-A: 0920 s. on with tfc to 'HCYB' Belgrade, 1310 tfc
	'HCNOSVL'	UNO Vrela, SRB	PACTOR: 1620 tfc
	'HCSWIGE'	UNO Geneva, SUI	PACTOR: 1026-1820 tfc or msgs to 'HCBSNBA' Banja Luka or 'HCBSNSA' Sarajevo or 'HCHRVZA' Zagreb or 'HCYUGBE' Belgrade
	'HCYB'	UNO Belgrade, SRB	SITOR-A: 0920 msg to 'HCMP' Podgorica, 1134 + 1353 tfc
	'HCYE'	UNID Balkan UNO station (796)	SITOR-A: 1330 tfc
	'HCYK'	UNID Balkan UNO station (796)	SITOR-A: 1000 + 1417 tfc
	'HCYM'	UNO Metkovic, HRV	SITOR-A: 1353 tfc + msg to 'HCYS' Split
	'HCYS'	UNO Split, HRV	SITOR-A: 0848 tfc to 'HCYT' Tuzla, 1028 + 1229 tfc, 1353 tfc to 'HCYM' Metkovic
	'HCYT'	UNO Tuzla, BIH	SITOR-A: 0828 tfc; 0845 tfc to 'HCYS' Split
	'HCYUGBE'	UNO Belgrade, SRB	PACTOR: 0628-1646 tfc or msgs to 'HCBSNBA' Banja Luka or 'HCBSNBI' Bihac or 'HCBSNZE' Zenica or 'HCHRVZA' Zagreb or 'HCSWIGE' Geneva
	'HCYV'	UNO Vrela, SRB	SITOR-A: 1500 tfc
		UNO Brcko, BIH	SITOR-A: 1114 tfc
6475.5	HMZ	Pyongyang R, KRE	CW

6476.5		**UNID station (1195)**	**DUP-ARQ (!): 0710 tfc "ok col 38 qap sb++", s. off**
6476.7	**'HCHRVZA'**	**UNO Zagreb, HRV**	**PACTOR: 1440 very long binary data msg, final tfc "OK File C:\glplus\in\BIN-DATA07 closed", s. off**
		CP Gaeta, I (?)	**SITOR-A: 1455+1545+1606 tfc**
6477.0	DZU	Pasig R, PHL	CW
6477.5	KPH	San Francisco R, CA, USA	CW
	USU	Mariupol R, UKR	CW
	XSF	Lianyungang R, CHN	CW
6478.7	SVA 3	Athens R, GRC	CW
6479.0	HML	Namp'o R, KRE	CW
	HPP	Panama R, PNR	CW
6480.0	9GX	Tema R, GHA	CW
6480.5	TBH 5	TN Izmir, TUR	CW
6481.0	ZPK	Asuncion R, PRG	CW
	9MB 3	MN Georgetown, P.I., MLA	CW
6482.0	CLA 78	Habana R, CUB	CW
6483.0	**PBB**	**DN Den Helder, NLD**	**ITA2 75 Bd: 24 h channel status**
6484.0	LZL 3	Bourgas R, BUL	CW
6484.5	WSC	Tuckerton R, NJ, USA	CW
	XFL	Mazatlan R, MEX	CW
	XSV	Tianjin R, CHN	CW
6485.0	ESA	Tallinn R, EST	CW
	JCU	Choshi R, J	CW
6486.0	DZH	Manila R, PHL	CW
6487.0	URK	Kerch R, UKR	CW
6488.0	D4A	Mindelo R, S. Vicente, CPV	CW
6488.5	KPH	San Francisco R, CA, USA	CW
6489.0	XSJ	Zhanjiang R, CHN	CW
6491.5	JOS	Nagasaki R, J	CW
	PKC	Palembang R, INS	CW
	TAH	Istanbul R, TUR	CW
	9PA	Banana R, ZAI	CW
6492.0		**UNID teleprinter**	**100**
6493.0	VAI	CCG Vancouver, BC, CAN	CW
6493.5	**LYL**	**Klaipeda R, LTU**	**ITA2 50 Bd: 2119+2200+2326 R tts wtsca** CW
6495.0	**UHS**	**Murmansk R, RUS**	**ITA2 50 Bd: 0632+0742+1713+1724+1736 R tts wtsca** CW
6495.4	9WH 20	K. Kinabalu R, Sb., MLA	CW
6496.4	**CFH**	**CF Halifax, NS, CAN**	**ITA2 75 Bd: 24 h ry or wx** *FAX // 122.5 kHz $*
	EDF 2	Madrid R, E	CW
	FJP 6	Noumea R, NCL	CW
6497.0		**UNID teleprinter**	**100**
6499.9	PKN	Balikpapan R, INS	CW
	PKR	Semarang R, INS	CW
	WNU	Slidell R, LA, USA	CW
6500.0	OBQ	Iquitos R, PRU	CW
	PBC	**DN Goeree Island, NLD**	**ITA2 75 Bd: 0424+1300+1554+2042 encrypted tfc**
6501.0		coast stations, ch 601	SSB QSX 6200.0 kHz
	FJP 7	Noumea R, NCL	
	HZG	Dammam R, ARS	
	LPW	Bahia Blanca R, ARG	
	NMC	USCG S. Franc., CA, USA	

6501.0	NMF	USCG Boston, MA, USA		
	NMN	USCG Portsmouth, VA, USA		
	NMO	USCG Honolulu, HWA		
	NOJ	USCG Kodiak, ALS		
	NPN	USN Apra Harbour, GUM		
	NRV	USCG Apra Harbour, GUM		
	PKX	Jakarta R, INS		
	SVN 31	Athens R, GRC		
	S3D	Chittagong R, BGD		
	TFA	Reykjavik R, ISL		
	UCY	Astrakhan' R, RUS		
	UDN	Novorossiysk R, RUS		
	UWY	Yalta R, UKR		
	VFA	CCG Inuvik, NWT, CAN		
	V5W	Walvis Bay R, NMB		
	XFB	Ciudad del Carmen R, MEX		
	XFM	Manzanillo R, MEX		
	XFP	Chetumal R, MEX		
	XFQ	Salina Cruz R, MEX		
	XFY	Guaymas R, MEX		
	XSG	Shanghai R, CHN		
	YIR	Basrah R, IRQ		
	YQI 31	Constanta R, ROU		
	YUW	Bar R, SRB		
	4PB	Colombo R, SLK		
	5AT	Tripoli R, LBY		
	7TF 34	Boufarik R, ALG		
	8Q2	Male R, MLD		
	9AR	Rijeka R, HRV		
	9MG 30	Georgetown R, Pin. I., MLA		
6502.0	TBB 6	TN Ankara, TUR	CW	
6504.0		coast stations, ch 602	SSB	QSX 6203.0 kHz
	CUL	Lisbon R, POR		
	HCG	Guayaquil R, EQA		
	HPP 20	Panama R, PNR		
	IAR	Rome R, I		
	LZW	Varna R, BUL		
	OSU 31	Oostende R, BEL		
	PCG 31	Scheveningen R, NLD		
	PKC 4	Panjang R, INS		
	PKD	Surabaya R, INS		
	PKG	Banjarmasin R, INS		
	PPJ	Juncao R, B		
	PPM	Manaus R, B		
	PPO	Olinda R, B		
	SPC 31	Gdynia R, POL		
	S3D	Chittagong R, BGD		
	S3E	Khulna R, BGD		
	TAN	Izmir R, TUR		
	TAO	Trabzon R, TUR		
	3AC 6	Monte Carlo R, MCO		
	3DP	Suva R, FJI		
	9AR	Rijeka R, HRV		
	9GX	Tema R, GHA		
	9KK 5	Safat R, KWT		
	9VG 62	Singapore R, SNG		
		Abidjan F R, CTI		
		UNID teleprinter	75	
6507.0		coast stations, ch 603	SSB	QSX 6206.0 kHz
	DZJ	Bulacan R, PHL		

6507.0	DZZ	Manila R, PHL		
	HSA	Bangkok R, THA		
	HZG	Dammam R, ARS		
	LGN 30	Rogaland R, NOR		
	LPL	General Pacheco R, ARG		
	LZR	Ruse R, BUL		
	OBY	Paita R, PRU		
	OXZ	Lyngby R, DNK		
	SAG	Goeteborg R, S		
	SVN 32	Athens R, GRC		
	S3D	Chittagong R, BGD		
	TFA	Reykjavik R, ISL		
	TUA	Abidjan R, CTI		
	UCZ	Provideniya R, FE, RUS		
	UIK	Vladivostok R, SE, RUS		
	VCT	Tors Cove R, NFLD, CAN		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	XFC	Cozumel R, MEX		
	XFK	La Paz R, MEX		
	XFP	Chetumal R, MEX		
	4XO	Haifa R, ISR		
	5AT	Tripoli R, LBY		
	5BA 34	Nicosia R, CYP		
	5WA	Apia R, SMO		
	7TF 35	Boufarik R, ALG		
	9WW 20	Kuching R, Sarawak, MLA		
6510.0		coast stations, ch 604	SSB	QSX 6209.0 kHz
	ASK	Karachi R, PAK		
	A3A	Nuku'alofa R, TON		
	A4M	Muscat R, OMA		
	EHY	Madrid R, E		
	IAR	Rome R, I		
	KEJ	Hoolehua R, HWA		
	LZL	Bourgas R, BUL		
	LZW	Varna R, BUL		
	OBF	Mollendo R, PRU		
	PKB	Belawan R, INS		
	PKC	Palembang R, INS		
	PKF	Ujung Pandang R, INS		
	PKG	Banjarmasin R, INS		
	PKK	Kupang R, INS		
	PKM	Bitung R, INS		
	PKN	Balikpapan R, INS		
	PKN 6	Samarinda R, INS		
	PKP	Dumai R, INS		
	PKR	Semarang R, INS		
	PKS	Pontianak R, INS		
	PNK	Jayapura R, INS		
	PPR	Rio de Janeiro R, B		
	PPT	Santarem R, B		
	P2M	Port Moresby R, PNG		
	P2W	Wewak R, PNG		
	SPO 31	Szczecin R, POL		
	S3E	Khulna R, BGD		
	TAH	Istanbul R, TUR		

6510.0	UGE	Arkhangelsk R, RUS		
	UHY	Murmansk R, RUS		
	VRX	Victoria Harbour R, HKG		
	WCM	Withamsville R, OH, USA		
	XFC	Cozumel R, MEX		
	XFE	Ensenada R, MEX		
	XSQ	Guangzhou R, CHN		
	XSV	Tianjin R, CHN		
	4XO	Haifa R, ISR		
	5RS	Toamasina R, MDG		
	9AR	Rijeka R, HRV		
		many RAN stations, AUS		
6513.0		coast stations, ch 605	SSB	QSX 6212.0 kHz
	A3A	Nuku'alofa R, TON		
	CWF	Punta Carretas R, URG		
	DZI	Bacoor R, PHL		
	DZO	Bulacan R, PHL		
	E3C	Assab R, ERI		
	FFL 31	Saint Lys R, F		
	HLS	Soul R, KOR		
	HSA 20	Bangkok R, THA		
	LZR	Ruse R, BUL		
	NMF	USCG Boston, MA, USA		
	OBC	Callao R, PRU		
	OBQ	Iquitos R, PRU		
	OXZ	Lyngby R, DNK		
	PKA	Sabang R, INS		
	PKP 2	Teluk Bayur R, INS		
	PKS	Pontianak R, INS		
	PPC	Itajai R, B		
	PPL	Belem R, B		
	SAG	Goeteborg R, S		
	SUH	Alexandria R, EGY		
	S3E	Khulna R, BGD		
	UBE	Petropavl.-Km. R, FE, RUS		
	UEO	Nakhodka R, SE, RUS		
	UFO	Kholmsk R, FE, RUS		
	USO	Izmail R, UKR		
	VAI	CCG Vancouver, BC, CAN		
	VFF	CCG Iqaluit, NWT, CAN		
	WFN	Jeffersonville R, IN, USA		
	XVU	Can Tho R, VTN		
	YIR	Basrah R, IRQ		
	ZLA	Awanui R, NZL		
	5AB	Benghazi R, LBY		
	5RS	Toamasina R, MDG		
	6YI	Kingston R, JMC		
	7TF 36	Boufarik R, ALG		
	9AR	Rijeka R, HRV		
	9KK 52	Safat R, KWT		
	9WH 20	K. Kinabalu R, Sb., MLA		
6516.0		coast stations, ch 606 (WORLDWIDE CALLING FREQUENCY)	SSB	QSX 6215.0 kHz
6519.0		coast stations, ch 607	SSB	QSX 6218.0 kHz
	FFL 32	Saint Lys R, F		
	HKB	Barranquilla R, CLM		
	HKC	Buenaventura R, CLM		
	JNA	JN Tokyo, J		
	LPX	Com. Rivadavia R, ARG		
	VIB	Brisbane R, QLD, AUS		

6519.0	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	VRX	Victoria Harbour R, HKG		
	WLO	Mobile R, AL, USA		
6522.0		coast stations, ch 608	SSB	QSX 6221.0 kHz
	LSD 836	Buenos Aires R, ARG		
	PPJ	Juncao R, B		
	UAT	Moscow R, RUS		
	UGC	Saint Petersburg R, RUS		
	UIW	Kaliningrad R, RUS		
	VZX	Penta R, Gosf., NSW, AUS		
	XVN	Nha Trang R, VTN		
	XVR	Vung Tau R, VTN		

6525.0 - 6685.0 AERONAUTICAL MOBILE (R)

6526.0	AMS = 2A 2B 3A 4A 6F 12G 14F	SSB	
	UNID AFTN station (1295)	**ITA2 50 Bd: 1352 msg (Air Algerie DAH6040 flight plan fm El Djaza'ir to Biskra), s. off**	
6529.0	AMS = 3B 6G	SSB	
6532.0	AMS = CWP, 2A 2B 3A 4A 12F	SSB	
6535.0	AMS = SAT, 2C 5D 6G 9D 10A 10D 12C 12J 14B	SSB	
6538.0	AMS = 3A 3B 9B 11B, VAFI	SSB	
6541.0	AMS = 2C 6G 10C 13C 14C	SSB	
6544.0	AMS = 1C 3A 3B 5A 5C 6C 10D	SSB	
6547.0	AMS = 2A 2C 5D 6G 9B 10B 10E 12E 12J 13F 13K 14A	SSB	
6550.0	AMS = 1B 3A 3C 5B 6D 11B 13J	SSB	
6553.0	AMS = 2A 2C 4B 6G 9 10 12E 12F 13E 13F 13K 14A	SSB	
6556.0	AMS = SEA, 1 3A 3C 10C 13C	SSB	
6559.0	AMS = AFI, 2A 3B 6G 11B 13J 14D	SSB	
6562.0	AMS = CWP, 2B 2C 10D 13C	SSB	
6565.0	AMS = 2A 4 6G 11B 14E	SSB	
6568.0	AMS = 2B 2C 3B 6D 7C 10C 13C	SSB	
6571.0	AMS = EA, 12C	SSB	
6574.0	AMS = AFI, 2A 6G 10B 13I 13M 14D	SSB	
6577.0	AMS = CAR, 2B 2C 3B 4B 6D 13E	SSB	
6580.0	AMS = 6G 7E 9C 10A 13C 13J 13K 14, VEUR	SSB	
6583.0	AMS = 2 3 6E	SSB	

6586.0		AMS = CAR, 2C 6G 7 13G 14C	SSB
6589.0		AMS = 3	SSB
6592.0		AMS = NCA, 12C	SSB
6595.0		AMS = 1B 3B 3C 5B 6D	SSB
6598.0		AMS = EUR, 4B 6G 9B 10B 10E 12E 13H	SSB
6601.0		AMS = 2	SSB
6604.0		AMS = 1D 6G 7C 10A 13N 14B, VNAT	SSB
6607.0		AMS = 3A 6A 6B	SSB
6608.0		UNID teleprinter	81
6610.0		AMS = 1D 6G 14F	SSB
6613.0		AMS = 3A 6A 6B 13G	SSB
6616.0		AMS = 4A 6G 12G 14E	SSB
6617.0		Kiyev Air, UKR	SSB
		Moscow Air, RUS	SSB
		Riga Air, LVA	SSB
		Rostov-na-Donu Air, RUS	SSB
		Saint Petersburg Air, RUS	SSB
6619.0		AMS = 3A 6B	SSB
6622.0		AMS = NAT, 6G 7F 9B 12C 13D	SSB
6625.0		AMS = MID, 3B	SSB
6628.0		AMS = NAT, 6G 7E 12C 13D 13M 14	SSB
6631.0		AMS = MID, 3B 6C	SSB
6634.0		AMS = 6G	SSB
6637.0		AMS = W I/II/III	SSB
6640.0		AMS = W II/V	SSB
6643.0		AMS = W I/IV	SSB
6646.0		AMS = W II/V	SSB
6649.0		AMS = SAM, 3A 6G	SSB
6652.0		AMS = 6G 7B	SSB
6655.0		AMS = NP, 2B 6E	SSB
6658.0		AMS = 3C 6A	SSB
6661.0		AMS = NP, 2B 6E	SSB
6662.7		Egyptian E London, G	SITOR-A: 2230 ATU-A msg to Cairo
6664.0		AMS = 3C 5A	SSB
6667.0		AMS = 1E 2B 6F	SSB
6670.0		AMS = 3C	SSB
6673.0		AMS = AFI CEP, 2A 6G 10F 12D 13D 14B	SSB
		UNID teleprinter	75
6676.0		AMS = VSEA	SSB
6679.0		AMS = VPAC	SSB
6682.0		AMS = 6G	SSB
6683.0	AFA	USAF Andrews, MD, USA	SSB
	AFH	USAF A. AFB, Balboa, PNR	SSB

6685.0 - 6765.0 AERONAUTICAL MOBILE (OR)

6685.0		AMS	SSB
	7ZA 222	SAUDIA Jeddah, ARS	
6688.0		AMS	SSB
	GXW	RN Portland, G	
6691.0		AMS	SSB
		Khabarovsk Air, SE, RUS	

6691.0		Magadan Air, FE, RUS	
		Yuzhno-Sakh. Air, FE, RUS	
6694.0		AMS	SSB
	CFH	CF Halifax, NS, CAN	
	CJX	CF St. John's, NFLD, CAN	
	CKN	CF Victoria, BC, CAN	
6697.0		AMS	SSB
	MKL	RAF Edinburgh, G	
6700.0		AMS	SSB
6702.0		**UNID teleprinter**	**75**
6703.0		AMS	SSB
6706.0		AMS	SSB
	CHR	CF Trenton, ONT, CAN	
	VXA	CF Edmonton, ALTA, CAN	
6709.0		AMS	SSB
6712.0		AMS	SSB
	AFA	USAF Andrews, MD, USA	
	AFI	USAF McClellan, CA, USA	
	AFS	USAF Offutt AFB, NE, USA	
	AJE	USAF Croughton, G	
	AJK	USAF Ramstein AFB, D	
	AKA	USAF Elmendorf AFB, ALS	
	CUW	PAF/USAF Lajes AFB, AZR	
	FDE	FAF Villacoublay, F	
	FDE 5	FAF Evreux, F	
	GFW	RAF Akrotiri, CYP	
		FAF Istres, F	
6715.0		AMS	SSB
	AFA	USAF Andrews, MD, USA	
	AFE	USAF MacDill, FL, USA	
	AFI	USAF McClellan, CA, USA	
	AGA	USAF Hickam AFB, HWA	
	AKA	USAF Elmendorf AFB, ALS	
	CHR	CF Trenton, ONT, CAN	
	CFH	CF Halifax, NS, CAN	
	CJU	CF Vancouver, BC, CAN	
	DHM 91	GAF Münster, D	
6718.0		AMS	SSB
6720.0	OVC	DM Groennedal, GRL	SSB
	OWD	DAF Vaerloese, DNK	SSB
6721.0		AMS	SSB
6724.0		AMS	SSB
		Milne Bay Air, PNG	
6727.0		AMS	SSB
	DHJ 59	GN Wilhelmshaven, D	
6729.0	ILE	IAF Cagliari, I	SSB
6730.0		AMS	SSB
	AFA	USAF Andrews, MD, USA	
	AFE	USAF MacDill, FL, USA	
	AFE 83	USAF Wideawake, ASC	
	AFH	USAF A. AFB, Balboa, PNR	
	AFI	USAF McClellan, CA, USA	
	AFS	USAF Offutt AFB, NE, USA	
	AJE	USAF Croughton, G	
	AKA	USAF Elmendorf AFB, ALS	
		Aktyubinsk Air, KAZ	
		IAF Sigonella, I	
		SAF Cartagena, E	
6731.0	DHJ 59	GN Wilhelmshaven, D	SSB
	OWD	DAF Vaerloese, DNK	SSB

6733.0		AMS	SSB
	IDR	IN Rome, I	SSB
6736.0		AMS	SSB
	CHR	CF Trenton, ONT, CAN	
6737.0		many SAR stations, I	SSB
6738.0		**UNID teleprinter**	**200**
6739.0		AMS	SSB
	AFA	USAF Andrews, MD, USA	
	AFE	USAF MacDill, FL, USA	
	AFH	USAF A. AFB, Balboa, PNR	
	AFI	USAF McClellan, CA, USA	
	AFS	USAF Offutt AFB, NE, USA	
	AGA	USAF Hickam AFB, HWA	
	AIE	USAF Andersen AFB, GUM	
	AIF	USAF Yokota, J	
	AJE	USAF Croughton, G	
	AJO	USAF Adana, TUR	
	AKA	USAF Elmendorf AFB, ALS	
	CUW	PAF/USAF Lajes AFB, AZR	
	XPH	USAF Thule AFB, GRL	
	MQP	RAF Upavon, G	
		RAF Wideawake, ASC	
6739.5	FDG	FAF Bordeaux, F	CW
6740.0		IAF Martina Franca, I	SSB
		IAF Rome, I	SSB
6740.7	**FDY**	**FAF Orleans, F**	**ITA2 50 Bd: 0804 ry**
6741.7		**TN Tunis, TUN**	**SITOR-A: 1420 + 1900 + 2120 msgs to PLM ships**
6742.0		AMS	SSB
6743.0		IAF Martina Franca, I	SSB
		IAF Pisa, I	SSB
6745.0		AMS	SSB
	CFH	CF Halifax, NS, CAN	
	CHR	CF Trenton, ONT, CAN	
	CJX	CF St. John's, NFLD, CAN	
6748.0		AMS	SSB
		IAF IFOR Sarajevo, BIH	
		IAF Pisa, I	
6748.9		**UNID station (796)**	**ITA2 50 Bd: 1825 Korean msgs wla**
6751.0		AMS	SSB
6754.0		AMS	SSB
	CHR	CF Trenton, ONT, CAN	
	CJX	CF St. John's, NFLD, CAN	
	CKN	CF Victoria, BC, CAN	
	DHN 66	GAF Geilenkirchen, D	
	VXA	CF Edmonton, ALTA, CAN	
6756.0	AFA	USAF Andrews, MD, USA	SSB
6757.0		AMS	SSB
	AFE	USAF MacDill, FL, USA	
	AXJ	RAAF Perth, WA, AUS	
6758.0	MKL	RAF Edinburgh, G	CW
	OLX	Prague, CZE	CW/SSB
6759.0		**UNID teleprinter**	**75**
6759.9		**UNID teleprinter**	**150**
6760.0		AMS	SSB
	AFA	USAF Andrews, MD, USA	
	AXK	RAAF East Sale, VIC, AUS	
	CHR	CF Trenton, ONT, CAN	
	IDR	IN Rome, I	

6762.5	DHN 66	GAF Geilenkirchen, D	SSB
6765.0 - 7000.0		FIXED + Land Mobile	<524 525>
6765.0	HSW	Bangkok Meteo, THA	SSB
6766.8		UNID teleprinter	75
6769.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 1402 msg (5lgs) + msg, 1442 msgs, 1713 msg (5fgs) + msg to Stockholm CW
6771.7	'RFLI'	FF Fort de France, MRT	ARQ-E3 192 Bd: 2118-0808 tfc or msg to 'RFFA' Paris [BFL]
6772.5		UNID teleprinter	75
6777.5		UNID teleprinter	200
6779.0	DHJ 59	GN Wilhelmshaven, D	SSB
6780.2	HGX 21	MFA Budapest, HNG	DUP-ARQ: 0620 msg (5lgs) + msg (E MTI nx) to HGX 26, 0750 msg to HGX 26, 1700 msg (press review)
6781.7		MFA Cairo, EGY	SITOR-A: 2114 ATU-A msg
6784.7	'RFTJ'	FF Dakar, SEN	ARQ-E3 200 Bd: 0015+2233 "controle de voie" to 'RFQP' Jibuti [DKJ]
6785.0	VJN	RFDS Cairns, QLD, AUS	SSB
6788.5	MKK	RAF London, G	VFT: ITA2 50 Bd: 0522+1712+1940+2225 ryi
6790.0	*YMA 20*	*Ankara Meteo, TUR*	*FAX // 3377.0 kHz $*
6793.0	HGX 21	MFA Budapest, HNG	ITA2 50 Bd: 0912 clg HGX 45
6794.5		UNID teleprinter	UuU MFSK
6797.0		UNID teleprinter	200
6797.8	EAE 220	MFA Madrid, E	SITOR-A: 1416+1458 tfc
6798.0	FDY	FAF Orleans, F	ITA2 50 Bd: 0750-1736 ry
6799.0	VJN	RFDS Cairns, QLD, AUS	SSB
		UNID teleprinter	CIS 10-11-11 MFSK
6803.0		DOSC Moscow, RUS	CIS 10-11-11 MFSK: 1635 encrypted tfc
6804.4		Romanian E Ankara, TUR	RUM-FEC 218 Bd: 1405 encrypted msg + msg to Bucharest
6805.0	RBK 72	R Moscow feeder, RUS	SSB
6806.0		UNID teleprinter	MFSK 12
6807.0		Polish E Belgrade, SRB	POL-ARQ 100 Bd: 1130+1630 msgs (5fgs) to SNN 299 Warsaw
6809.0	WGY 9..	many FEMA stations, USA	SSB
6812.0	AFA	USAF Andrews, MD, USA	SSB
6814.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 1502 msgs
		DOSC Moscow, RUS	CIS 10-11-11 MFSK: 1936 encrypted tfc
6815.0	ICA	IN Ancona, I	SSB
	ICP	IN Trapani, I	SSB
	ICZ	IN Venezia, I	SSB
	IDW	IN Lipari, I	SSB
		IN Cagliari, I	SSB
		IN Catania, I	SSB
		IN Marina di Carrara, I	SSB
		IN Mazara del Vallo, I	SSB
		IN Messina, I	SSB
6815.9		UNID teleprinter	150
6816.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1926 msg (Romanian nx)

6817.0	AFA	USAF Andrews, MD, USA	SSB
6818.2		UNID teleprinter	CIS 10-11-11 MFSK
6819.5	YPM 36	Bucharest, ROU	ITA2 75 Bd: 0745 operational msg
6820.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1905 msg to Brussels
6822.5	RKC 24	R Moscow feeder, RUS	SSB
6824.0		UNID teleprinter	CIS 10-11-11 MFSK
6824.1		MFA Bucharest, ROU	RUM-FEC 164 Bd: 0622 encrypted tfc
6825.0	AAA 3USA	USA MARS Fort Meade, MD, USA	Packet Radio: 0235 tfc to AAT 4TFL
	AAT 4TFL	UNID USA MARS station (696)	Packet Radio: 0235 tfc to AAA 3USA Fort Meade
	FAV 22	FA Mont-Valerien, F	CW
	VJQ	RFDS Kalgoorlie, WA, AUS	SSB
6826.0	SDR 4	Stockholm Air, S	SSB
		UNID teleprinter	75
6828.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1730+2207 msgs, 2225 encrypted msgs after "DDD..." + msg (Romanian nx) CW
6830.0	AFA	USAF Andrews, MD, USA	SSB
	AGA	USAF Hickam AFB, HWA	SSB
		PETRA Amman, JOR	ITA2 50 Bd: 1500+1600 A nx, 1700-1900 E nx
		UNID teleprinter	200
6832.0		UNID teleprinter	MFSK
6834.0		UNID station (1295)	IRA-ARQ 300 Bd: 1412 encr. tfc
6835.0	GFL 22	Bracknell Meteo, G	ITA2 75 Bd: 1626-0950 ry or wx
6836.0	FDI	FAF Aix, F	CW
6836.5		MFA Bucharest, ROU	RUM-FEC 218 Bd: 1317 encrypted tfc
6836.7	'RFTPA'	FF N'djamena, TCD	ARQ-E3 200 Bd: 2120-0545 tfc or operational msg to 'RFFVA' Paris
6838.0		UNID station (296)	ALIS: 0834+0922+1414 encrypted tfc
6840.0	VJY	RFDS Darwin, NT, AUS	SSB
6841.7		Egyptian E Rome, I	SITOR-A: 1847 ATU-A msgs to Cairo
6844.5	FDC	FAF Metz, F	CW
6845.0	OLZ	MFA Prague, CZE	ITA2 100 Bd: 0933 msg (Czech nx)
	VJJ	RFDS Charlevl., QLD, AUS	SSB
6849.0	P28 BM	NTM Port Moresby, PNG	SSB
6850.0	VLZ	TELSTRA Davis, ATA	SSB
	VLV	TELSTRA Mawson, ATA	SSB
	VNJ	TELSTRA Casey, ATA	SSB
	VNM	TELSTRA Hobart, TAS, AUS	SSB
6856.7		Egyptian E Rome, I	SITOR-A: 1731 tfc to Cairo
6859.5	FDC	FAF Metz, F	CW
6860.0	PWX	BN Brasilia, B	CW
	'RPFN'	PN Lisbon, POR	ITA2 75 Bd: 2100+2116 clg 'RETJ' Madrid
6865.0	AJK 33	USAF Aviano, I	SSB
6866.0		UNID teleprinter	MFSK 12
6869.5		UNID teleprinter	UuU MFSK
6871.0	FDI 22	FAF Narbonne, F	CW
6871.7		MFA Cairo, EGY	SITOR-A: 1645 ATU-A msgs + msg (5lgs), 1715 tfc to Paris

6872.0	OLZ	MFA Prague, CZE	ITA2 100 Bd: 0557 msg (5fgs) + final tfc, s. off CW
6872.2		UNID station (396)	ITA2 50 Bd: 1628 I tfc "testo di prova"
6873.0	'P'	Beacon Kaliningrad, RUS	CW
		VoA Greenvl. fdr., NC, USA	ISB
6873.5	ICS	IN La Spezia, I	SSB
6875.0	FDI	FAF Aix, F	CW
		UNID teleprinter	75
6877.8	ETD 3	Addis Ababa Air, ETH	ITA2 50 Bd: 1814-0354 ry or msg [VTA]
6880.0	ICE	IN Brindisi, I	SSB
	VJK	RFDS Meekath., WA, AUS	SSB
6885.0		UNID teleprinter	200
6885.9		UNID teleprinter	150
6890.0	RAN 76	R Moscow feeder, RUS	ISB
	VJT	RFDS Carnarvon, WA, AUS	SSB
	VNZ	RFDS Pt. Augusta, SA, AUS	SSB
6890.2	'RFFA'	MOD Paris, F	ARQ-E3 200 Bd: 1133+1542 msgs to 'RFFVAT' Incirlik, 2254 tfc to 'RFFVAT'
6894.0	3DP	PTT Suva, FJI	SSB
	3DQ	PTT Rotuma Island, FJI	SSB
6894.5		UNID teleprinter	50
6895.0	PBC	DN Goeree Island, NLD	ITA2 75 Bd: 0324+0759-2217 encrypted tfc
6898.7		UNID FF station (896)	ARQ-E 96 Bd: 0530 idle, 2310 tfc
6901.7	'RFTJ'	FF Dakar, SEN	ARQ-E3 192 Bd: 2200-0809 clg or "controle de voie" or tfc to 'RFLI' Fort de France [TJI]
6918.5	*ECA 7*	*Madrid Meteo, E*	*FAX // 3650.0 kHz $*
6920.0	VJC	RFDS Bkn. Hill, NSW, AUS	SSB
6922.5		UNID teleprinter	75
6923.5	OMV	Prague, CZE	ITA2 50 Bd: 1000 ry
6925.0	VJB	RFDS Derby, WA, AUS	SSB
6930.0	EBA	SN Madrid, E	CW
6932.5	'HCBSNSA'	UNO Sarajevo, BIH	SSB
6933.0		UNID station (996)	ITA2 50 Bd: 0550 wx synopsis, s. off
6936.0	RMP	CISN Kaliningrad, RUS	CW
6936.7	'RFLI'	FF Fort de France, MRT	ARQ-E3 192 Bd: 2229-0835 tfc or "controle de voie" [LIJ]
6937.0	AFE 70	USAF Cape Can., FL, USA	SSB
		Polish E Vienna, AUT	POL-ARQ 100 Bd: 0841+0929+1024 msgs to SNN 299 Warsaw
6941.0	7XR 37	Djanet Meteo, ALG	SSB
	7XR 44	El Golea Meteo, ALG	SSB
	7XR 70	In Salah Meteo, ALG	SSB
6945.0	VJB	RFDS Derby, WA, AUS	SSB
	VJJ	RFDS Charlevl., QLD, AUS	SSB
6950.0	BJZ 20	Wuhan Meteo, CHN	ITA2 75 Bd: 0905 ry, wx
	RJK 78	*Kiyev Meteo, UKR*	*FAX // 3360.0 kHz*
	VJD	RFDS Alice Spr., NT, AUS	SSB
6952.5		Jogindarnagar, IND	CW
		Port Blair, IND	CW
6954.0		Polish E Stockholm, S	POL-ARQ 100 Bd: 0925 tfc to SNN 299 Warsaw
6960.0	VKL	RFDS Port Hedl., WA, AUS	SSB

6962.0		MFA Oslo, NOR	TWINPLEX YYBB BYBY: SITOR-A: 0654+0900 tfc, 1245 msg
		Norwegian E Berne, SUI	SITOR-A: 1230 msgs to Oslo
6963.8		UNID teleprinter	ARQ-E 192
6964.0	YMY	Samsun Meteo, TUR	CW
6965.0	VJI	RFDS Mount Isa, QLD, AUS	SSB
6966.0	FDY	FAF Orleans, F	ITA2 50 Bd: 24 h ry
	YMB 20	Bandirma Meteo, TUR	CW
6972.0	YOG 59	ROMPRES Bucharest, ROU	ITA2 50 Bd: 1500+1600 F nx, 1700+1800+1900 E nx
6975.0	6VU	ASECNA Dakar, SEN	ITA2 50 Bd: 0053+0508+1837+2013 msgs
6976.0	'RFFHCA'	FF Ajaccio, F	ARQ-E 192 Bd: 0639-1832 msgs [EHQ]
6978.7	'RFTJF'	FF Port Bouet, CTI	ARQ-E3 48 Bd: 2330-0537 tfc or "controle de voie"
6980.0		UNID station (1096)	TWINPLEX 96 Bd 500-500-500: 1220 tfc
6981.7	'LIBERATOR'	UNID MILF station, INS/PHL (996)	SITOR-A: 0945 msg, Maasim (on Leyte Island) mentioned
6982.0		UNID teleprinter	150
6984.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 0815-1637 msgs or msg (Polish nx) to various European embassies
			CW
6985.0	BSB 29	Lanzhou Meteo, CHN	ITA2 75 Bd: 24 h ry or wx
	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 0957+1514+1521 msgs, 1740 msg + msg (5fgs) to Sofia, 1800+2325 msgs
6988.0		UNID teleprinter	75
6991.4		Laghouat Prefecture, ALG	Coquelet 8: 1400+1920 msg
6993.0	AFA	USAF Andrews, MD, USA	SSB
6993.6		MARINET Tehran, IRN	SITOR-B: 1640 s. on with operational msg, s. off
6996.0	'RC2BAL'	ICRC Banja Luka, BIH	SSB
	'RC2BEL'	ICRC Belgrade, SRB	SSB
	'RC2BIH'	ICRC Bihac, BIH	SSB
	'RC2MOT'	ICRC Mostar, BIH	SSB
	'RC2SPL'	ICRC Split, HRV	SSB
	'RC2TUZ'	ICRC Tuzla, BIH	SSB
	'RC2ZAG'	ICRC Zagreb, HRV	SSB
	'RC2ZEN'	ICRC Zenica, BIH	SSB
6997.0		IAF Martina Franca, I	SSB
6997.4	HB8 GVA	ICRC Geneva, SUI	PACTOR: 0954-1822 tfc or msgs to 'RC2PAL' Pale or 'RC2SAR' Sarajevo or 'RC2ZAG' Zagreb
	'RC2PAL'	ICRC Pale, BIH	PACTOR: 0930 tfc, 1450 tfc to HB8 GVA Geneva, 1520 tfc
	'RC2SAR'	ICRC Sarajevo, BIH	PACTOR: 0954-1323 tfc or msg (E daily nx summary) to HB8 GVA Geneva
	'RC2ZAG'	ICRC Zagreb, HRV	PACTOR: 0920-1453 tfc or msgs to HB8 GVA Geneva
	'RC2ZEN'	ICRC Zenica, BIH	PACTOR: 1040 msgs
6998.0		UNID teleprinter	300
6998.5	DEK 23	DRK Berlin, D	SITOR-B: 0813 tfc, 1202 clg DEK 34, 1530 ry
	DEK 26	DRK Düsseldorf, D	SITOR-B: 1208 tfc
	DEK 30	DRK Hamburg, D	SITOR-B: 1212 tfc

6998.5	DEK 88	ICRC Bonn, D	SITOR-B: 0940 tfc, 1209 tfc to DEK A2510 SSB
6999.5	'RC2KNI'	ICRC Knin, HRV	PACTOR: 1502 msg to 'RC2ZAG' Zagreb
	'RC2ZAG'	ICRC Zagreb, HRV	PACTOR: 1502 tfc to 'RC2KNI' Knin

7000.0 - 7100.0 AMATEUR + AMATEUR-SATELLITE <510 526 527>

7008.0	RDL	Smolensk, RUS	CW
7038.9	'S'	Beacon Arkhangelsk, RUS	CW
7039.0	'C'	Beacon Moscow, RUS	CW
7073.0		UNID teleprinter	81
7089.0	RFE 76	Tyumen', SW, RUS	CW

7100.0 - 7300.0 Region 1 = BROADCASTING
Region 2 = AMATEUR <521 528>
Region 3 = BROADCASTING

7300.0 - 7350.0 BROADCASTING <SSB only, as from 01 April 2007>
FIXED + Land Mobile

7301.0	T3F 9	CM Kiritimati, KIR	SSB
		CM Tabuaeran, KIR	SSB
		CM Teraina, KIR	SSB
7302.0		UNID teleprinter	100
7305.0	*JMH 2*	*Tokyo Meteo, J*	*FAX // 3622.5 kHz $*
7309.7	'RFHJ'	FF Papeete, Tahiti, OCE	ARQ-E3 100 Bd: 0003+0100 tfc, 0913 msg (5lgs), 1029 tfc, 1215+1230+1315 "controle de voie" [HJI]
7311.0	FDY	FAF Orleans, F	ITA2 50 Bd: 24 h ry
7312.0	T3G 2	MOH Bairiki, Tar. At., KIR	SSB
7319.0	SUU	Cairo Meteo, EGY	ITA2 100 Bd: 24 h wx
7321.5	FDY	FAF Orleans, F	ITA2 50 Bd: 0954+1208+1230+1432+2235 ry
7335.0	CHU	Ottawa TS, ONT, CAN	CW/SSB
7340.0	VZ8 SK	RFDS Katherine, NT, AUS	SSB
7349.5		many FEMA stations, USA	SSB

7350.0 - 8100.0 FIXED + LAND MOBILE

7350.0	BAF 44	Beijing Meteo, CHN	ITA2 50 Bd: 1408-2228 wx
7350.7	7RQ 20	MFA El Djaza'ir, ALG	Coquelet 8: 0755-0930 tfc or msg to Tripoli or ATU-A msg or msg (F APS nx)
7357.0	VJN	RFDS Cairns, QLD, AUS	SSB
7362.5	FDY	FAF Orleans, F	ITA2 50 Bd: 0733 ry
7378.0	FDE 2	FAF Tours, F	CW
7383.0		Polish E Copenhagen, DNK	POL-ARQ 100 Bd: 1225 msgs (5fgs) to SNN 299 Warsaw, final tfc, s. off; 1306 tfc + msg (5fgs) to SNN 299, 1630 final tfc to SNN 299, s. off

7390.0	GXQ	BA London, G	VFT: ITA2 50 Bd: 0725 ryi
7391.5		many USN MARS stations	SSB
7392.0	VJI	RFDS Mt. Isa, QLD, AUS	SSB
7395.0	*HSW 64*	*Bangkok Meteo, THA*	*FAX $*
7398.0		*USAF AWS Ceiba, PTR*	*FAX 120/576: 0410+0441+ 0612+0948 charts*
7401.0	ATP 57	Delhi Meteo, IND	ITA2 50 Bd: 1725 wx
7405.0		Manado, INS	SSB
7407.0		UNID teleprinter	74
7407.5	FDY	FAF Orleans, F	ITA2 50 Bd: 0919-1625 ry
7418.7		Souk Ahras Prefect., ALG	Coquelet 8: 1335 msgs to Annaba
7420.0	*BDF*	*Shanghai Meteo, CHN*	*FAX // 5100.0 kHz*
7420.0	'RFFH'	FF Marseille, F	ARQ-E 72 Bd: 1128 operational msg, "controle de voie"; 1742 tfc [UBF]
7421.4		Oum Theboul Pref., ALG	Coquelet 8: 1025 msg
7421.5		Algerian E Muscat, OMA	Coquelet 8: 1315 msg to 7RQ 20 El Djaza'ir
7423.0	5YD	Nairobi Air, KEN	ITA2 50 Bd: 1501-0444 ry or msgs [KVA]
7433.5	HLL 5	Soul Meteo, KOR	ITA2 50 Bd: 0900 ry, wx *FAX // 5857.0 kHz $*
7442.5	'RFFBBYZ'	FF Zagreb, HRV	ARQ-E 184 Bd: 2020 msgs (5lgs) after "BBBB" to 'RFFXQA' Sarajevo [UQA]
7445.0	VKL	RFDS Port Hedl., WA, AUS	SSB
7449.5		MFA Rome, I	SITOR-A: 0730 msgs to Malta, 0905 msgs (5lgs) to various embassies
7455.0	MKK	RAF London, G	VFT: ITA2 50 Bd: 0741+1436 ryi
7456.7	'RFTJ'	FF Dakar, SEN	ARQ-E3 192 Bd: 2011-0851 tfc or msg or "controle de voie" [AFL]
7458.0		Romanian E Budapest, HNG	RUM-FEC 218 Bd: 0850 msgs to Bucharest
7461.0	5YE	Nairobi Meteo, KEN	ITA2 100 Bd: 0018+0208+ 1940+2347 wx
7465.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 0944 msg (5fgs) + msg
	VJN	RFDS Cairns, QLD, AUS	SSB
	5YE	*Nairobi Meteo, KEN*	*FAX $*
7468.9	OZU 25	MFA Copenhagen, DNK	TWINPLEX YYBB YBYB: SITOR-A: 0751-1602 tfc or msgs
7470.0	*VLM*	*Casey Meteo, ATA*	*FAX $*
7471.4		Romanian E Budapest, HNG	RUM-FEC 218 Bd: 1525 msg to Bucharest
7472.5	FDC	FAF Metz, F	CW
7484.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 1216-1943 msgs
7490.0	T3T 5	PWD Bairiki, T. Atoll, KIR	SSB
7493.0		UNID teleprinter	MFSK 12
7501.0	VJI	RFDS Mt. Isa, QLD, AUS	SSB
7508.0	*ZRO 2*	*Pretoria Meteo, AFS*	*FAX // 4014.0 kHz $*
7510.0	HZN	Jeddah Meteo, ARS	ITA2 100 Bd: 1550-1739 wx
		UNID teleprinter	75
7512.0	ZRO 2	Pretoria Meteo, AFS	ITA2 75 Bd: 1618-0405 wx
7521.5	FDY	FAF Orleans, F	ITA2 50 Bd: 0844-1630 ry
7524.0	TYE	ASECNA Cotonou, BEN	ARQ-M2 96 Bd: A: 1619-0611 "ch" or msgs [UNA] B: 1740-0520 "ch" or msg
7528.4		Ouargla Prefecture, ALG	Coquelet 8: 1255-1430 msgs

7528.5	'RETWBG'	Guardia Civil Gerona, E	SITOR-A: 1600-1614 msgs to 'RETXX' Madrid
	'RETXX'	MOI Madrid, E	SITOR-A: 1600-1614 tfc to 'RETWBG' Gerona
7529.5	'RETWB'	Guardia Civil Barcelona, E	SITOR-A: 1443 tfc to 'RETXX' Madrid
	'RETXX'	MOI Madrid, E	SITOR-A: 1443 msg to 'RETWB' Barcelona
7535.0	*AXI 33*	*Darwin Meteo, NT, AUS*	*FAX // 2628.0 kHz $*
		many USN stations	SSB
7538.6		Baoshan, CHN	SITOR-A: 0301 msgs to Ruili
		Lashio, MYA	SITOR-A: 0343 tfc to Lashio
		Mangshi Airport, CHN	SITOR-A: 0411 msg + final tfc to Kunming, s. off
		Ruili, CHN	SITOR-A: 0301 tfc to Baoshan, 0343 msg to Lashio
7542.0	FXD	Dzaoudzi Meteo, MYT	SSB
	FXE	Europa Island Meteo, REU	SSB
	FXJ	Juan de Nova Meteo, REU	SSB
	FXR	Saint Denis Meteo, REU	SSB
	FXT	Tromelin I. Meteo, REU	SSB
	FXZ	Glorieuses Is. Meteo, REU	SSB
7542.7	'RFTJD'	FF Libreville, GAB	ARQ-E3 192 Bd: 2148-0605 tfc or "controle de voie" to 'RFTJ' Dakar [JDJ]
7552.5	5ST 41	Antananarivo Meteo, MDG	ITA2 100 Bd: 1535 ry, wx; 1823 wx
7554.6		UNID teleprinter	150
7564.0		UNID teleprinter	81
7565.0	YIX 75	INA Baghdad, IRQ	ITA2 50 Bd: 0700 + 1400 + 1600 + 1800 A nx
7569.5	'C37A'	MOSSAD Tel Aviv, ISR	ARQ-E 288 Bd: 1659 + 1835 encrypted tfc to '6XM8' BNDVB Bonn
7570.0	*RBX 72*	*Tashkent Meteo, UZB*	*FAX // 3690.0 kHz $*
7572.5	FDG	FAF Bordeaux, F	CW
	'C37A'	MOSSAD Tel Aviv, ISR	ARQ-E 288 Bd: 2027 final tfc to '6XM8' BNDVB Bonn, s. off ITA2 100 Bd: 2046 clg + final tfc to '6XM8' BNDVB Bonn
7573.0		UNID teleprinter	75
7573.5	'C37A'	MOSSAD Tel Aviv, ISR	ARQ-E 288 Bd: 1650 encrypted tfc to '6XM8' BNDVB Bonn
7574.0		UNID teleprinter	75
7578.5	'C37A'	MOSSAD Tel Aviv, ISR	ARQ-E 288 Bd: 1606 + 1622 encrypted tfc to '6XM8' BNDVB Bonn
7580.0	VVD 57	Delhi Meteo, IND	ITA2 50 Bd: 24 h wx
7582.0	*NKW*	*USN Diego Garcia, DGA*	*FAX // 5262.0 kHz $*
7586.0	'RFVITT'	FF Dzaoudzi, MYT	ARQ-E 96 Bd: 1622-0418 tfc or msg (5lgs)
7592.5	FDI 22	FAF Narbonne, F	CW
7595.0	*AOK*	*USN Rota, E*	*FAX $*
		Addis Ababa Air, ETH	SSB
		Muqdisho Air, SOM	SSB
		Riyadh Air, ARS	SSB
		San'a Air, YEM	SSB
7596.0	IEA 20	IA Rome, I	ITA2 50 Bd: 0651-1500 tfc or msgs fm 'RIFA'
	5UA	ASECNA Niamey, NGR	ARQ-M2 96 Bd: A: 1825 msgs B: 1849 + 1953 msgs
7598.0	IEA 20	IA Rome, I	SSB

7600.0	HD2 IOA	Guayaquil TS, EQA	CW/SSB
7603.0		UNID station (1295)	ALIS-2 241 Bd: 1728 tfc
7603.9	SAM	MFA Stockholm, S	SWED-ARQ: 1505 msgs to SAM 40 Warsaw
	SAM 40	Swedish E Warsaw, POL	SWED-ARQ: 1505 tfc to SAM Stockholm
7605.0	AFA	USAF Andrews, MD, USA	SSB
7606.7	'RFFA'	MOD Paris, F	ARQ-E3 192 Bd: 1447-0827 "controle de voie" or tfc or msg to 'RFTJ' Dakar [LFA]
7606.9	SAM	MFA Stockholm, S	SWED-ARQ: 0840+0850+0855 tfc; 1023 final tfc, s. off
7607.0		Honolulu Air, HWA	SSB
		Nadi Air, FJI	SSB
7614.0	'RFFH'	FF Marseille, F	ARQ-E 192 Bd: 0651-2054 msgs
7616.7		MFA Cairo, EGY	SITOR-A: 1500 ATU-A msgs + msg (5lgs) to Tunis, 1609 msg
7620.0		UNID teleprinter	ITA2 100 encrypted
7622.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 0759 tfc to Vienna, 1047 msgs to Cologne
		Polish E Den Haag, NLD	POL-ARQ 100 Bd: 1346 msgs to SNN 299 Warsaw
7625.0	HZN 47	Jeddah Meteo, ARS	ITA2 100 Bd: 24 h ry or wx
7631.7		MFA Cairo, EGY	SITOR-A: 0652 ATU-A tfc
7634.0	'P6Z'	MFA Paris, F	FEC-A 192 Bd: 1440 tfc, 1500 clg 'F9S' Prague, 1557 msgs to various embassies
7636.0		UNID teleprinter	75
7637.0		Polish E Stockholm, S	POL-ARQ 100 Bd: 0845 msg to SNN 299 Warsaw
7639.2		UNID station (196)	SITOR-B: 0940-2110 time msgs
7640.0	RMP	CISN Kaliningrad, RUS	CW
7642.7	'RFFP'	MOD Paris, F	ARQ-M2 200 Bd: A: 24 h tfc + msg (5lgs) after "BBBB" to FKW Sarajevo [FDXA] B: 24 h tfc + AFTN msgs [PVA] + msg (5lgs) after "BBBB" to 'RFFVAY' Sarajevo [FDXB]
7643.2	'RFLIG'	FF Cayenne, GUF	ARQ-E 96 Bd: 0019 tfc, 0610 "controle de voie", 0840+2353 msg [RTI]
7643.7	'RFVI'	FF Le Port, REU	ARQ-E3 100 Bd: 1931-0212 "controle de voie" or svc msg to 'RFFA' Paris [RUN]
7644.2	'RFFVA'	FAF Paris, F	ARQ-M2 200 Bd: A: 1900-0955 tfc or "controle de voie" to 'RFFVAY' Sarajevo [FKWA]
7646.0	DDH 7	Hamburg Meteo, D	ITA2 50 Bd: 24 h ry or wx
7651.0		VoA Greenvl. fdr., NC, USA	ISB
7654.0		UNID teleprinter	75
7657.0	GYA	RN London, G	ITA2 75 Bd: 0749 clg MTT
7658.0	YZI 223	TANJUG Belgrade, SRB	ITA2 50 Bd: 1000+1100+1300+1700+2100+2200 E nx
7659.0	HBD 20	MFA Berne, SUI	SITOR-A: 1220 tfc to HBD 57 Vienna
	HBD 57	Swiss E Vienna, AUT	SITOR-A: 1220 msg (5lgs) to HBD 20 Berne
7663.5	FDY	FAF Orleans, F	ITA2 50 Bd: 0100+0554-1731 ry
7668.5		UNID teleprinter	125
7670.0	*RCC 76*	*Moscow Meteo, RUS*	*FAX // 53.6 kHz $*

7671.5	FDY	FAF Orleans, F	ITA2 50 Bd: 0100+1639 ry
7677.0	HBD 20	MFA Berne, SUI	SITOR-A: 0702-1830 msgs (5lgs)
7678.0	T3F 6	MILIPI B., Tarawa At., KIR	SSB
7680.0	GXQ	BA London, G	VFT: ITA2 50 Bd: 24 h ryi
7682.5		UNID teleprinter	125
7693.0	AFA	USAF Andrews, MD, USA	SSB
	3BT 3	Vacoas Meteo, MAU	ITA2 75 Bd: 0030+0330+0630+0930+1230+1530+1830 wx
7705.0	UTN	Khabarovsk, SE, RUS	CW
7705.7	'RFTJ'	FF Dakar, SEN	ARQ-E3 192 Bd: 2237-0635 tfc or "controle de voie" to 'RFQP' Jibuti [DKJ]
7706.5		UNID teleprinter	100
7710.0	MKK	RAF London, G	VFT: ITA2 50 Bd: 24 h ryi
	VFF	*CCG Iqaluit, NWT, CAN*	*FAX // 3253.0 kHz $*
	VFR	*CCG Resolute, NWT, CAN*	*FAX // 3253.0 kHz $*
7716.5		UNID station (896)	T-PLEX 6 tones: 0308+1114 tfc
7719.5		UNID station (396)	T-PLEX 6 tones: 1736+1647+2001 tfc
7722.5	FDI 22	FAF Narbonne, F	CW
	5ST	ASECNA Antananar., MDG	CW
	5SV	ASECNA Morondava, MDG	CW
7727.5	FDY	FAF Orleans, F	ITA2 50 Bd: 0938+1233-1500 ry
7728.7		MFA Cairo, EGY	SITOR-A: 1520+1530+1538 ATU-A msgs
7755.2	'RFQP'	FF Jibuti, DJI	ARQ-M2 200 Bd: A: 1953-0419 tfc or "controle de voie"
7760.0	RGH 77	Arkhangelsk Meteo, RUS	ITA2 50 Bd: 24 h ry or wx
7762.0	*RGH 77*	*Arkhangelsk Meteo, RUS*	*FAX // 3657.0 kHz*
7763.5	D6Z	ASECNA Moroni, COM	ARQ-E3 48 Bd: 0419 tfc to 5ST Antananarivo, 1232 msg to 5ST; QSX 7831.5 kHz [MTC]
7765.0	AFE 70	USAF Cape Can., FL, USA	SSB
7766.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 1421+1530 tfc, 1700 msg (Polish nx), 1810 msgs
7769.0		UNID teleprinter	150
7770.0	GYU	RN Gibraltar, GIB	VFT: ITA2 75 Bd: 24 h encrypted tfc
			VFT: ARQ-M2 96 Bd: B: 24 h encrypted tfc
	3DP	PTT Suva, FJI	SSB
	3DQ	PTT Rotuma Island, FJI	SSB
7771.0		UNID teleprinter	81
7776.5	GXQ	BA London, G	VFT: ITA2 50 Bd: 0722 ryi
	OST 33	Oostende R, BEL	SITOR-B: H+10 tfc list
7779.7	'RFFVAE'	FF Dhahran, ARS	ARQ-M2 200 Bd: A: 1923-2108 tfc or msgs (5lgs) after "BBBB" to 'RFFVA' Paris [DET]
7784.0		USAF AWS Ceiba, PTR	ITA2 75 Bd: 0030+0108+0230+0252+1307 wx
7786.0		Polish E London, G	POL-ARQ 100 Bd: 1540+1633 msgs to SNN 299 Warsaw
7789.7		Egyptian E Rome, I	SITOR-A: 1928+2210 ATU-A msg to Cairo
7792.0	VLH	SDE Charlevl., QLD, AUS	SSB
7800.0	VKA	Adelaide Police, SA, AUS	SSB
		Alice Springs Pol., NT, AUS	SSB
7801.5	NPM	USN Pearl Harbour, HWA	COMB
7803.0	VJI	RFDS Mt. Isa, QLD, AUS	SSB

7805.0	'DFZG'	MFA Belgrade, SRB	FEC-A 144 Bd: 1300 msg (5fgs) + encrypted msg after "XIXIXI...", s. off
7806.0	YZI 225	TANJUG Belgrade, SRB	ITA2 50 Bd: 1200+1700+1800 E nx
7808.0	'DFZG'	MFA Belgrade, SRB	ITA2 75 Bd: 0547-1543 msgs (E or Serbian nx) or encrypted msg after "XPXPXP..." or "XRXRXR..." or "XYXYXY..."
7810.5		UNID teleprinter	125
7813.0	AFA	USAF Andrews, MD, USA	SSB
	GYU	RN Gibraltar, GIB	Piccolo 6: 2034 tests, ry
7815.0	BAA 22	Beijing Meteo, CHN	ITA2 50 Bd: 2343-1057 ry or wx
		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1410+1432 msg
7819.9		UNID teleprinter	150
7821.0		Romanian E Brussels, BEL	RUM-FEC 218 Bd: 1631 msg to Bucharest
7822.2	'RFFA'	MOD Paris, F	ARQ-E3 200 Bd: A: 2152+2227 tfc B: 0100+1800+1859+2100+2152+2200 tfc
7828.0		Warsaw, POL	ITA2 50 Bd: 1631 msgs (5fgs)
			SSB
		UNID IFOR station (996)	ITA2 50 Bd: 0550 ry, tfc
		UNID teleprinter	CIS 10-11-11 MFSK
7831.5	5ST	ASECNA Antananarivo, MDG	ARQ-E3 48 Bd: 0326-2212 tfc to D6Z Moroni; QSX 7763.5 kHz [TMC]
7832.0		UNID teleprinter	MFSK
7832.1		UNID teleprinter	200
7834.0	'ROX'	UNID SOUD station (1195)	ITA2 75 Bd: 1530 ry, msg (5fgs)
		UNID teleprinter	ITA2 50 encrypted
7834.5	FDC	FAF Metz, F	CW
7836.0		UNID teleprinter	200
7838.7		Egyptian E Nicosia, CYP	SITOR-A: 1520 ATU-A msgs to Cairo
7845.0		UNID teleprinter	75
7850.0		Roseau Police, DMA	SSB
7855.0		UNID teleprinter	75
7859.0	FDI 22	FAF Narbonne, F	CW
7863.0	BJZ 21	Wuhan Meteo, CHN	ITA2 75 Bd: 24 h ry or wx
7863.5	SPW	Warsaw R, POL	SITOR-A: 24 h tts
			SITOR-B: 0000+0200+0400+0600+0800+1000+1200+1400+1600+1800+2000+2200 tfc list
			CW
7865.0	SPW	Warsaw R, POL	SSB
7869.5		UNID teleprinter	125
7870.0		*USAF AWS Ceiba, PTR*	*FAX // 3232.0 kHz*
7871.7	LN2 A	Beacon Sveio, NOR	CW
		MFA Cairo, EGY	SITOR-A: 2002 ATU-A msgs
7876.0		UNID teleprinter	CIS 10-11-11 MFSK
		UNID teleprinter	75
7880.0	*DDK 3*	*Hamburg Meteo, D*	*FAX // 3855.0 kHz $*
7885.5		Italian E Sofia, BUL	SITOR-A: 0825+0915+1245+1410 msg to Rome
7886.7		UNO Dire Dawa, ETH	PACTOR: 1119 tfc to Gambela
		UNO Gambela, ETH	PACTOR: 1119 msg to Dire Dawa

7890.0	ZLBC	GPO Campbell Island, NZL	SSB
	ZME	GPO Raoul I., K. Is., NZL	SSB
7893.5	OEC	MFA Vienna, AUT	SI-ARQ 96 Bd: 5 or 6 characters:- 0814-2000 tfc or msg or msg (5lgs) or msg (press review) to OEC 21 Warsaw or OEC 61 Rome or Belgrade SI-FEC 96 Bd: 1238 tfc
	OEC 21	Austrian E Warsaw, POL	SI-ARQ 96 Bd: 6 characters: 1103 s. on with tfc + msg to OEC Vienna
	OEC 61	Austrian E Rome, I	SI-ARQ 96 Bd: 5 characters: 1300 + 1410 msg to OEC Vienna
	OEC ..	Austrian E Belgrade, SRB	SI-ARQ 96 Bd: 6 characters: 1339 msg (5lgs) to OEC Vienna
7896.7	'RFLI'	FF Fort de France, MRT	ARQ-E3 96 Bd: 0356-0953 tfc or msgs [LIH]
7898.0		BGS Bonn, D	VFT: ARQ-E 72 Bd: 0820-1741 tfc "guten morgen hier bonn phfs" or "schlage vor wir testen unseren qvt und dann koennt ihr erstmal einen heissen tee trinken" or encrypted msg after "EEEE..." to Mostar
7899.0	OMS	MFA Bratislava, SVK	ITA2 100 Bd: 1006 msg, final tfc, s. off
7904.0		many NATO st., BIH/HRV	SSB
7909.7	'S1'	Seismic-1, LBY	SITOR-A: 0657 + 1700 + 1711 tfc or msg "mohamed left the crew and the camp without permission of the admin or myself - rgds hugh" to Tripoli
	'S2'	Seismic-2, LBY	SITOR-A: 0520 + 1704 tfc to Tripoli
		Tripoli, LBY	SITOR-A: 0520 + 0657 + 1700 + 1711 tfc or msgs to 'S1' Seismic-1 or 'S2' Seismic-2
7911.0		AHE Lyon, F	PACTOR: 1130 tfc SSB
		AHE Sarajevo, BIH	SSB
7916.0	DGG 91	PIAB Bonn, D	FEC-A 96 Bd: 0645-0845 + 1345-1445 + 1600-1800 G nx
7917.0	FDC	FAF Metz, F	CW
7919.0	AFA	USAF Andrews, MD, USA	SSB
7919.9		UNID teleprinter	150
7925.0	'RPFN'	PN Lisbon, POR	ITA2 75 Bd: 0100 ry, 0130 clg PWX Brasilia, 2100 ry, 2130 clg 'RETJ' Madrid
7926.7	'LIBERATOR'	UNID MILF station, INS/PHL (196)	SITOR-A: 1020 msgs (daily situation reports) "morale of trps dash high bt", Sanga Sanga Airport (near Samarinda, Kalimantan) and Sibutu, Simunul and Sitangkai (Sulu archipelago) mentioned
7930.0	NPM	USN Pearl Harbour, HWA	COMB
7931.7		Egyptian E El Djaza'ir, ALG	SITOR-A: 1745 tfc + ATU-A msg to Cairo SITOR-B: 1743 tfc to Cairo
7934.0		Polish E Vienna, AUT	POL-ARQ 100 Bd: 0747 msgs to SNN 299 Warsaw

7937.7	'RFFP'	MOD Paris, F	ARQ-E3 200 Bd: 1448-0650 tfc or msgs or msg (5lgs) to 'RFFVAT' Incirlik [FDX]
7938.0		Ghardaia Air, ALG	SSB
		In Amenas Air, ALG	SSB
		Touggourt Air, ALG	SSB
7941.8		UNID teleprinter	81
7946.0	'RFVI'	FF Le Port, REU	ARQ-E 96 Bd: 1508-0420 tfc or msg or msg (5lgs) after "BBBB" to 'RFVITT' Dzaoudzi [ITT]
7946.5	DHJ 51	Grengel Meteo, D	ITA2 100 Bd: 0900+0930+1531+1605 wx
7946.7	'LIBERATOR'	UNID MILF station, INS/PHL (596)	SITOR-A: 1042 E military msgs
7947.0		UNID teleprinter	81
7947.5		UNID teleprinter	125
7951.5		SLRA Freetown, SRL	SITOR-A: 0653 tfc to Moyamba
		SLRA Moyamba, SRL	SITOR-A: 0653 msgs (daily crew and equipment lists) to Freetown
7953.0	'F9S'	French E Prague, CZE	FEC-A 192 Bd: 1014 msg (5lgs) to 'P6Z' Paris
7958.0	OMZ 88	MFA Bratislava, SVK	ITA2 75 Bd: 0911 msg (press review)
7960.0	GXQ	BA London, G	VFT: ITA2 50 Bd: 0937+2030 ryi
	OLZ	MFA Prague, CZE	ITA2 100 Bd: 0718-1005+2114 msg or msg (Czech nx) or msg (E nx)
		many Customs stat., AUS	SSB
7961.7	'LIBERATOR'	UNID MILF station, INS/PHL (396)	SITOR-A: 0953+1001 E military msgs
7966.0		UNID teleprinter	75
7970.0	RAW 73	R Moscow feeder, RUS	SSB
		UNID teleprinter	200
7975.0	SPW	Warsaw R, POL	SITOR-B: 1400+1500+1800 Polish nx
	VJY	RFDS Darwin, NT, AUS	SSB
7980.0		UNID teleprinter	200
7983.1		UNID station (196)	ALIS: 1519 ry
7983.7	'RFTJ'	FF Dakar, SEN	ARQ-E3 48 Bd: 0724+1250 "controle de voie" to 'RFTJF' Port Bouet, 2350 msg (F nx) to 'RFTJF' [TJF]
7986.0		UNID teleprinter	200
7990.0		UNID teleprinter	200
7991.5	NNN 0FTJ	UNID USN MARS st. (1295)	PACTOR: 2210 tfc
7994.2	'RFFVAT'	FF Incirlik, TUR	ARQ-E3 200 Bd: 1520-0720 tfc or msgs or msgs (5lgs) after "BBBB" to 'RFFA' Paris [FKW]
7995.0	NGD	USN McMurdo Sound, ATA	SSB
	NPX	USN South Pole Stn., ATA	SSB
7997.0	AFA	USAF Andrews, MD, USA	SSB
7998.5	FDY	FAF Orleans, F	ITA2 50 Bd: 0859-1309 ry
8000.0	JJY	Tokyo TS, J	COMB
		UNID teleprinter	81
8001.7	'RFHJ'	FF Papeete, Tahiti, OCE	ARQ-E3 96 Bd: 0830-1450 tfc or "controle de voie" to 'RFLI' Fort de France [HJL]
8002.0		UNID teleprinter	300
8005.0	RCD 33	R Moscow feeder, RUS	ISB

8006.0	OMS	MFA Bratislava, SVK	ITA2 100 Bd: 0917 msg (5fgs), 1000 tfc, 1401 msg
8007.0		UNID teleprinter	100
8010.7	7RQ 20	MFA El Djaza'ir, ALG	Coquelet 8: 2133 msg (F nx) to Beiing, 2142 tfc, 2210 msgs + ATU-A msgs to Beijing
8013.5		Algerian E Niamey, NGR	Coquelet 8: 1436 msg to 7RQ 20 El Djaza'ir
8014.0	VZ8 SK	RFDS Katherine, NT, AUS	SSB
		UNID teleprinter	81
8017.5	AIE	USAF Andersen AFB, GUM	COMB
	IBA	USN Napoli, I	ITA2 75 Bd: 0814 tfc, 0917 + 1125 ry
		UNID teleprinter	75
8020.0	HMF 85	KCNA Pyongyang, KRE	ITA2 50 Bd: 1230-1430 + 1500-1700 + 1800-2100 E nx
8022.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1044 msg to Prague
			RUM-FEC 218 Bd: 1519 tfc
8024.1		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1854 tfc, 2030 msg (Romanian nx)
			CW
8026.0	AFA	USAF Andrews, MD, USA	SSB
8028.0	SNG 202	Warsaw, POL	ITA2 100 Bd: 0730 ry
	3BZ	Plaisance Air, MAU	SSB
		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1013-1618 msg or encrypted msgs
			RUM-FEC 218 Bd: 1310 + 1600 encrypted tfc
		Pointe Corail Air, ROD	SSB
		Romanian E Bonn, D	RUM-FEC 164 Bd: 1828 msg to Bucharest
		Sharm el Sheikh, EGY	SSB
8029.0	AFA	USAF Andrews, MD, USA	SSB
8031.0	'HCBSNSA'	UNO Sarajevo, BIH	SITOR-A: 1018 tfc to 'HCHRVZA' Zagreb
	'HCHRVZA'	UNO Zagreb, HRV	SITOR-A: 1018 msg to 'HCBSNSA' Sarajevo, 1550 tfc to 'HCYUGJA' Jablanica
	'HCYUGJA'	UNO Jablanica, SRB	SITOR-A: 1550 msgs to 'HCHRVZA' Zagreb
	'RFFXL'	FF Naqoura, LBN	ARQ-E 72 Bd: 1644-0544 tfc or "controle de voie" to 'RFFX' Paris [XZL]
		Polish E Sofia, BUL	POL-ARQ 100 Bd: 1547 tfc to SNN 299 Warsaw
8031.5		many USN MARS stations	SSB
8032.0	AFA	USAF Andrews, MD, USA	SSB
8035.0	VJD	RFDS Alice Spr., NT, AUS	SSB
		UNID teleprinter	75
8040.0	AFA	USAF Andrews, MD, USA	SSB
	GFA 23	*Bracknell Meteo, G*	*FAX // 2618.5 kHz $*
8043.3		UNID teleprinter	200
8045.0	VJJ	RFDS Charlevl., QLD, AUS	SSB
8046.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 2040 msg (Bulgarian nx)
8050.0	AFI	USAF McClellan, CA, USA	SSB
		UNID teleprinter	75

8050.2	**'RFQP'**	**FF Jibuti, DJI**	**ARQ-M2 200 Bd: A: 1905-0341 tfc or "controle de voie" [QPB] B: 2033 "controle de voie" [QPC]**
8051.3		**UNID station (1295)**	**SITOR-A: 1805 E tfc, s. off**
8054.0		**UNID teleprinter**	**200**
8056.0		**UNID teleprinter**	**81**
8063.2	**'RFFA'**	**MOD Paris, F**	**ARQ-M2 200 Bd: B: 1736-0341 "controle de voie" or tfc or msg (5lgs) to 'RFQP' Jibuti [RQF]**
8065.0		**UNID teleprinter**	**100**
8070.0	**3DP**	**PTT Suva, FJI**	**SSB**
	3DQ	**PTT Rotuma Island, FJI**	**SSB**
8073.5		**UNID station (796)**	**ALIS-2 241 Bd: 1315+1800 tfc**
8075.0		**Romanian E Vienna, AUT**	**RUM-FEC 218 Bd: 0851 msgs to Bucharest**
8079.0		**UNID teleprinter**	**100**
8080.0	*NAM*	*USN Norfolk, VA, USA*	*FAX // 3357.0 kHz $*
8083.0	*RIJ 75*	*Tashkent Meteo, UZB*	*FAX // 3280.0 kHz $*
8085.0	**MKK**	**RAF London, G**	**VFT: ITA2 50 Bd: 0649-2009 ryi**
8085.7		**UNID station (196) (MKK?)**	**VFT: AUTOSPEC? 103 Bd auto-correlation 7 bits: 1530 tfc**
8090.0		**UNID teleprinter**	**CIS 10-11-11 MFSK**
8092.0	**NNN 0MDA**	**USN MARS Manchester, NH, USA**	**PACTOR: 0237 test "winMARS MBO mode"**
8094.5	**FDC**	**FAF Metz, F**	**CW**
		UNID teleprinter	**MFSK 12**
8095.0	**'DOR'**	**MFA Sofia, BUL**	**ITA2 75 Bd: 0822 schedule**
8099.0	**'DOR'**	**MFA Sofia, BUL**	**ITA2 150 Bd: 0815-1021 msg or msg (Bulgarian nx) or msg (E nx) or schedule**

8100.0 - 8195.0 FIXED + MARITIME MOBILE

8100.0		**MCG Port Mathurin, ROD**	**SSB**
8101.0		**coast + ship st., ch 1**	**SSB**
8101.7		**MFA Cairo, EGY**	**SITOR-B: 2037 ATU-A msg, 2230 clg Rome**
8104.0		**coast + ship st., ch 2**	**SSB**
8105.0	*SWA 28*	*Athens Meteo, GRC*	*FAX test // 8530.0 kHz*
	'RFFX'	**MOD Paris, F**	**ARQ-E 72 Bd: 1621-0542 "controle de voie" or msg to 'RFFXL' Naqoura [XXL]**
8106.7		**MFA Cairo, EGY**	**SITOR-A: 1918 ATU-A msg, 1931 tfc, 2147 ATU-A msg**
8107.0		**coast + ship st., ch 3**	**SSB**
8108.2	**'RFQP'**	**FF Jibuti, DJI**	**ARQ-M2 200 Bd: A: 1902-0342 "controle de voie" or tfc to 'RFFA' Paris [QRG]**
8110.0		**coast + ship st., ch 4**	**SSB**
	GXQ	**BA London, G**	**VFT: ITA2 50 Bd: 0743+0930+1421+1505+2012 ryi**
8113.0		**coast + ship st., ch 5**	**SSB**
		UNID teleprinter	**75**
8116.0		**coast + ship st., ch 6**	**SSB**
8117.0	**BMB**	**T'ai-pei Meteo, TAI**	**CW**
8119.0		**coast + ship st., ch 7**	**SSB**
8122.0		**coast + ship st., ch 8**	**SSB**
	BAF 36	*Beijing Meteo, CHN*	*FAX // 5527.0 kHz $*
		many RAN stations, AUS	**SSB**

8125.0		coast + ship st., ch 9	SSB
		UNID teleprinter	CIS 10-11-11 MFSK
8126.0		Polish E Stockholm, S	POL-ARQ 100 Bd: 0847+1425 msgs (5fgs) to SNN 299 Warsaw
8128.0		coast + ship st., ch 10	SSB
8131.0		coast + ship st., ch 11	SSB
8131.5		MFA Rome, I	SITOR-A: 1018 msgs (5lgs) to various embassies
8133.0		UNID teleprinter	200
8134.0		coast + ship st., ch 12	SSB
	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 1134 msg (Polish PAP nx)
8137.0		coast + ship st., ch 13	SSB
		Polish E Damascus, SYR	POL-ARQ 100 Bd: 0544 msgs to SNN 299 Warsaw
8137.4	TCY 1	AA Ankara, TUR	ITA2 50 Bd: 1400 Turkish nx, 1430+1500 E/F nx, 1630-1900 Turkish nx
8140.0		coast + ship st., ch 14	SSB
	BMF	*T'ai-pei Meteo, TAI*	*FAX // 4616.0 kHz $*
		Sydney Air, NSW, AUS	SSB
8142.5	FDY	FAF Orleans, F	ITA2 50 Bd: 0605+1001+1045+1620+2250 ry
8143.0		coast + ship st., ch 15	SSB
	OLX	Prague, CZE	CW
8143.5	T3T	PTT Bairiki, Tar. At., KIR	SSB
		PTT Tabuaeran, KIR	SSB
		PTT Teraina, KIR	SSB
8144.0	VJQ	RFDS Kalgoorlie, WA, AUS	SSB
8145.0	EIP	Shannon Air, IRL	ITA2 50 Bd: 24 h ry or "ch" or msgs [SMA]
8146.0		coast + ship st., ch 16	SSB
8146.6	*IMB 55*	*Rome Meteo, I*	*FAX // 4777.5 kHz $*
8148.0		Polish E Brussels, BEL	POL-ARQ 100 Bd: 0756 final tfc to SNN 299 Warsaw, s. off; 1134 tfc to SNN 299, 1312 msg (Polish nx)
8149.0		coast + ship st., ch 17	SSB
8150.0	VJC	RFDS Bkn. Hill, NSW, AUS	SSB
8151.0	IGJ 44	IN Augusta, I	ITA2 100 Bd: 0540-1850 channel status
			CW
8152.0		coast + ship st., ch 18	SSB
	HMF 86	KCNA Pyongyang, KRE	ITA2 50 Bd: 1145-1430 F nx
8155.0		coast + ship st., ch 19	SSB
8156.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 0805 msg (Polish nx), 1001 msgs, 1007 msg (5fgs) to Helsinki, 1045 tfc, 1514 msgs
8158.0		coast + ship st., ch 20	SSB
		UNID teleprinter	75
8161.0		coast + ship st., ch 21	SSB
8164.0		coast + ship st., ch 22	SSB
8165.0	VNZ	RFDS Pt. Augusta, SA, AUS	SSB
	5YD	Nairobi Air, KEN	ITA2 50 Bd: 1440-0534 ry or msgs [KSA]
8166.0		Polish E Kiyev, UKR	POL-ARQ 100 Bd: 0645+1053 msg to SNN 299 Warsaw
8166.7		MFA Cairo, EGY	SITOR-A: 1439 tfc SITOR-B: 1435 ATU-A tfc, into ↑↑
8167.0		coast + ship st., ch 23	SSB

8167.5	**LQB 9**	Buenos Aires TS, ARG	CW
8169.0		**UNID station (996)**	**ALIS-2 241 Bd: 1350 Turkish tfc**
8170.0		coast + ship st., ch 24	SSB
	GKX	Portishead Air, G	SSB
8173.0		coast + ship st., ch 25	SSB
8176.0		coast + ship st., ch 26	SSB
	FZR 81	**Saint Denis Meteo, REU**	**ITA2 75 Bd: 0025+0325+0625+0925+1225+1525+1825 ry, wx** *FAX $*
	VID	Darwin R, NT, AUS	SSB
	VIM	Melbourne R, VIC, AUS	SSB
	VIP	Perth R, WA, AUS	SSB
	VIS	Sydney R, NSW, AUS	SSB
	VIT	Townsville R, QLD, AUS	SSB
		Flying Fish Cove R, CHR	SSB
8177.0		**UNID teleprinter**	**CIS 10-11-11 MFSK**
8179.0		coast + ship st., ch 27	SSB
8180.5		**MFA Rome, I**	**SITOR-A: 0730 msg (5lgs)**
8181.0	GKX	Portishead Air, G	SSB
8182.0		coast + ship st., ch 28	SSB
8184.5		**UNID teleprinter**	**200**
8185.0		coast + ship st., ch 29	SSB
		AHE Lyon, F	SSB
		AHE Sarajevo, BIH	SSB
8186.3		**AHE Lyon, F**	**PACTOR: 0725-1800 tfc or msgs to Sarajevo or Split**
		AHE Sarajevo, BIH	**PACTOR: 1216 tfc + msg to Lyon**
		AHE Split, HRV	**PACTOR: 0725-1800 tfc or msgs to Lyon**
8188.0		coast + ship st., ch 30	SSB
8191.0		coast + ship st., ch 31	SSB
8192.0	**9MR**	**MN Johor Baharu, MLA**	**ITA2 50 Bd: 24 h ry**

8195.0 - 8815.0 MARITIME MOBILE <500A 500B 501 520B 529A>

8195.0		ship stations, ch 801	SSB	QSX 8719.0 kHz
8198.0		ship stations, ch 802	SSB	QSX 8722.0 kHz
8201.0		ship stations, ch 803	SSB	QSX 8725.0 kHz
8204.0		ship stations, ch 804	SSB	QSX 8728.0 kHz
8207.0		ship stations, ch 805	SSB	QSX 8731.0 kHz
8210.0		ship stations, ch 806	SSB	QSX 8734.0 kHz
8213.0		ship stations, ch 807	SSB	QSX 8737.0 kHz
8216.0		ship stations, ch 808	SSB	QSX 8740.0 kHz
8219.0		ship stations, ch 809	SSB	QSX 8743.0 kHz
8222.0		ship stations, ch 810	SSB	QSX 8746.0 kHz
8225.0		ship stations, ch 811	SSB	QSX 8749.0 kHz
8228.0		ship stations, ch 812	SSB	QSX 8752.0 kHz
8231.0		ship stations, ch 813	SSB	QSX 8755.0 kHz
8233.0	3BT	Vacoas Meteo, MAU	SSB	
		Agalega Is. Meteo, MAU	SSB	
		Port Mathurin Meteo, ROD	SSB	
		Saint Brandon Meteo, MAU	SSB	
8234.0		ship stations, ch 814	SSB	QSX 8758.0 kHz
8237.0		ship stations, ch 815	SSB	QSX 8761.0 kHz
8240.0		ship stations, ch 816	SSB	QSX 8764.0 kHz
8243.0		ship stations, ch 817	SSB	QSX 8767.0 kHz
8246.0		ship stations, ch 818	SSB	QSX 8770.0 kHz
8249.0		ship stations, ch 819	SSB	QSX 8773.0 kHz
8252.0		ship stations, ch 820	SSB	QSX 8776.0 kHz

8255.0		ship stations, ch 821 (WORLDWIDE CALLING FREQ.)	SSB QSX 8779.0 kHz
8258.0		ship stations, ch 822	SSB QSX 8782.0 kHz
8261.0		ship stations, ch 823	SSB QSX 8785.0 kHz
8264.0		ship stations, ch 824	SSB QSX 8788.0 kHz
8267.0		ship stations, ch 825	SSB QSX 8791.0 kHz
8270.0		ship stations, ch 826	SSB QSX 8794.0 kHz
8272.7		**MFA Cairo, EGY**	**SITOR-A: 1635 ATU-A msg to London**
8273.0		ship stations, ch 827	SSB QSX 8797.0 kHz
8276.0		ship stations, ch 828	SSB QSX 8800.0 kHz
8279.0		ship stations, ch 829	SSB QSX 8803.0 kHz
8282.0		ship stations, ch 830	SSB QSX 8806.0 kHz
8285.0		ship stations, ch 831	SSB QSX 8809.0 kHz
8288.0		ship stations, ch 832	SSB QSX 8812.0 kHz
8291.0	WORLDWIDE	DISTRESS AND SAFETY FREQ.	SSB
8294.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB
8297.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB
	ZLM	RNZN Auckland, NZL	SSB
8298.0	**'RBSL'**	**IN Mumbai, IND**	**ITA2 50 Bd: 1425-2055 ry or wx**
8302.5	IGJ	IN Augusta, I	SSB
		IN Pantelleria, I	SSB
8303.5	**LOR**	**AN Puerto Belgrano, ARG**	**ITA2 75 Bd: 2327-0640 ry or navigational warnings or wx or msg (5lgs)**
8304.5		**UNID teleprinter**	**75**
8305.7		**UNID teleprinter**	**75**
8306.7		**UNID teleprinter**	**75**
8314.5	ICT	IN Taranto, I	SSB
8316.0	ZLM	RNZN Auckland, NZL	SSB
8318.0		**UNID teleprinter**	**ITA2 75 encrypted**
8322.5		**UNID teleprinter**	**75**
8326.0	ICT	IN Taranto, I	SSB
8330.3	**'RFVI'**	**FF Le Port, REU**	**ARQ-E3 100 Bd: 1304-0343 tfc or "controle de voie" or test to 'RFFA' Paris [VII]**
8331.5	*GYA*	*RN London, G*	*FAX // 3652.0 kHz $*
8336.0		MCG Port Louis, MAU	SSB
8341.7	**'RFHI'**	**FF Noumea, NCL**	**ARQ-E3 100 Bd: 0014+1157+2130+2137+2153 tfc or "controle de voie" to 'RFVI' Le Port [HII]**
8342.0 - 8365.5		ship stations working frequencies	CW
8352.0		**UNID teleprinter**	**ITA2 100 encrypted**
8355.0		**UNID teleprinter**	**75**
8366.0		ship station calling, ch 1	CW group I
8366.5		ship station calling, ch 2	CW group I
8367.0		ship station calling, ch 5	CW group II
8367.5		ship station calling, ch 6	CW group II
8368.0		ship station calling, ch 3	CW common channel
8368.5		ship station calling, ch 7	CW group III
8369.0		ship station calling, ch 4	CW common channel
8369.5		ship station calling, ch 8	CW group III
8370.0		ship station calling, ch 9	CW group IV
8370.5		ship station calling, ch 10	CW group IV
8371.0 - 8376.0		ship stations working frequencies	CW
8376.5	WORLDWIDE	NBDPT DISTR. AND SAFETY F.	
8377.0		ship stations, channel 2	QSX 8417.0 kHz
8377.5		ship stations, channel 3	QSX 8417.5 kHz

8378.0		ship stations, channel 4	QSX 8418.0 kHz
8378.5		ship stations, channel 5	QSX 8418.5 kHz
8379.0		ship stations, channel 6	QSX 8419.0 kHz
8379.5		ship stations, channel 7	QSX 8419.5 kHz
8380.0		ship stations, channel 8	QSX 8420.0 kHz
8380.5		ship stations, channel 9	QSX 8420.5 kHz
8381.0		ship stations, channel 10	QSX 8421.0 kHz
8381.5		ship stations, channel 11	QSX 8421.5 kHz
8382.0		ship stations, channel 12	QSX 8422.0 kHz
8382.5		ship stations, channel 13	QSX 8422.5 kHz
8383.0		ship stations, channel 14	QSX 8423.0 kHz
8383.5		ship stations, channel 15	QSX 8423.5 kHz
8384.0		ship stations, channel 16	QSX 8424.0 kHz
8384.5		ship stations, channel 17	QSX 8424.5 kHz
8385.0		ship stations, channel 18	QSX 8425.0 kHz
8385.5		ship stations, channel 19	QSX 8425.5 kHz
8386.0		ship stations, channel 20	QSX 8426.0 kHz
8386.5		ship stations, channel 21	QSX 8426.5 kHz
8387.0		ship stations, channel 22	QSX 8427.0 kHz
8387.5		ship stations, channel 23	QSX 8427.5 kHz
8388.0		ship stations, channel 24	QSX 8428.0 kHz
8388.5		ship stations, channel 25	QSX 8428.5 kHz
8389.0		ship stations, channel 26	QSX 8429.0 kHz
8389.5		ship stations, channel 27	QSX 8429.5 kHz
8390.0		ship stations, channel 28	QSX 8430.0 kHz
8390.5		ship stations, channel 29	QSX 8430.5 kHz
8391.0		ship stations, channel 30	QSX 8431.0 kHz
8391.5		ship stations, channel 31	QSX 8431.5 kHz
8392.0		ship stations, channel 32	QSX 8432.0 kHz
8392.5		ship stations, channel 33	QSX 8432.5 kHz
8393.0		ship stations, channel 34	QSX 8433.0 kHz
8393.5		ship stations, channel 35	QSX 8433.5 kHz
8394.0		ship stations, channel 36	QSX 8434.0 kHz
8394.5		ship stations, channel 37	QSX 8434.5 kHz
8395.0		ship stations, channel 38	QSX 8435.0 kHz
8395.5		ship stations, channel 39	QSX 8435.5 kHz
8396.0		ship stations, channel 40	QSX 8436.0 kHz
8396.5		ship stations, channel 1	non-paired
8397.0		ship stations, channel 2	non-paired
8397.5		ship stations, channel 3	non-paired
8398.0		ship stations, channel 4	non-paired
8398.5		ship stations, channel 5	non-paired
		ship stations	QSX 8556.0 kHz (SAB 44)
8399.0		ship stations, channel 6	non-paired
8399.5		ship stations, channel 7	non-paired
8400.0		ship stations, channel 8	non-paired
	ICE	IN Brindisi, I	SSB
		IAF Martina Franca, I	SSB
8400.5		ship stations, channel 9	non-paired
8401.0		ship stations, channel 10	non-paired
8401.5		ship stations, channel 11	non-paired
8402.0		ship stations, channel 12	non-paired
8402.5		ship stations, channel 13	non-paired
8403.0		ship stations, channel 14	non-paired
8403.5		ship stations, channel 15	non-paired
8404.0		ship stations, channel 16	non-paired
8404.5		ship stations, channel 17	non-paired
		ship stations	QSX 8650.0 kHz (SPB 43)
8405.0		ship stations, channel 18	non-paired
8405.5		ship stations, channel 19	non-paired

8406.0		ship stations, channel 20	non-paired
8406.5		ship stations, channel 21	non-paired
8407.0		ship stations, channel 22	non-paired
8407.5		ship stations, channel 23	non-paired
8408.0		ship stations, channel 24	non-paired
8408.5		ship stations, channel 25	non-paired
8409.0		ship stations, channel 26	non-paired
8409.5		ship stations, channel 27	non-paired
8410.0		ship stations, channel 28	non-paired
		UNID teleprinter	75
8410.5		ship stations, channel 29	non-paired
8411.0		ship stations, channel 30	non-paired
8411.5		ship stations, channel 31	non-paired
8412.0		ship stations, channel 32	non-paired
8412.5		ship stations, channel 33	non-paired
8413.0		ship stations, channel 34	non-paired
8413.5		ship stations, channel 35	non-paired
8414.0		ship stations, channel 36	non-paired
8414.5	WORLDWIDE	DSC DISTRESS AND SAFETY F.	
8415.0	WORLDWIDE	SHIP STATIONS DSC FREQUENCY	QSX 8436.5 KHz
8415.5	WORLDWIDE	SHIP STATIONS DSC FREQUENCY	
8416.0	WORLDWIDE	SHIP STATIONS DSC FREQUENCY	
8416.5	WORLDWIDE	NBDPT MSI FREQUENCY	
	NMC	USCG S. Franc., CA, USA	SITOR-B: 0000 + 1800 wx
	NMF	USCG Boston, MA, USA	SITOR-B: 0030 ice report, 0140 wx, 1218 ice report, 1630 wx
	NMO	USCG Honolulu, HWA	SITOR-B: 0130 wx, 0330 navigational warnings, 0430 + 0730 + 1330 wx, 1730 navigational warnings, 2030 wx
	9MG 15	*Georgetown R, Pin. I., MLA*	*scheduled*
8417.0		coast stations, channel 2	QSX 8377.0 kHz
	CNP	*Casablanca R, MRC*	*scheduled*
	GKE 4	Portishead R, G	SITOR-A: 24 h tts SITOR-B: 0500 + 1300 + 2100 tfc list, 2130 wx CW
	JYO	*Aqaba R, JOR*	*scheduled*
	PKX	*Jakarta R, INS*	*scheduled*
	WNU	*Slidell R, LA, USA*	*scheduled*
	ZLA	Awanui R, NZL	SITOR-A: 0100 + 0735 + 1032 + 1207 tts
	9GX	*Tema R, GHA*	*scheduled*
8417.5		coast stations, channel 3	QSX 8377.5 kHz
	KFS	San Francisco R, CA, USA	SITOR-A: 0002-0740 + 1422 tts SITOR-B: 0030 + 0630 + 0730 tfc list, 0830 wx, 1130 + 1330 + 1530 tfc list CW
	UUI	Odessa R, UKR	SITOR-A: 1628-0545 R tts wtsca CW
	XSG	*Shanghai R, CHN*	*scheduled*
	XSV	*Tianjin R, CHN*	*scheduled*
8418.0		coast stations, channel 4	QSX 8378.0 kHz
	EQJ	*Chah Bahar R, IRN*	*scheduled*
	IAR	Rome R, I	SITOR-A: 24 h tts CW
	LSD 836	Buenos Aires R, ARG	SITOR-A: 1307 + 2118 tts SITOR-B: 0630 tfc list CW

8418.0	*PKD*	*Surabaya R, INS*	*scheduled*
	WLC	*Rogers City R, MI, USA*	*scheduled*
	ZLA	*Awanui R, NZL*	*scheduled*
8418.5		coast stations, channel 5	QSX 8378.5 kHz
	CNP	*Casablanca R, MRC*	*scheduled*
	D4A	*Mindelo R, S. Vicente, CPV*	*scheduled*
	HZG	*Dammam R, ARS*	*scheduled*
	LGB 2	Rogaland R, NOR	SITOR-A: 24 h tts CW
8419.0		coast stations, channel 6	QSX 8379.0 kHz
	IAR	*Rome R, I*	*scheduled*
	OFA	*Helsinki R, FIN*	*scheduled*
	UAT	Moscow R, RUS	SITOR-A: 24 h R tts wtsca SITOR-B: 1600 tfc list CW
	VIP 33	Perth R, WA, AUS	SITOR-A: 1059-2338 tts CW
	WLO	Mobile R, AL, USA	SITOR-A: 1410 + 2308-0834 tts SITOR-B: H + 35 tfc list, wx CW
	XVG 91	*Hai Phong R, VTN*	*scheduled*
	9WH 20	*K. Kinabalu R, Sb., MLA*	*scheduled*
8419.5		coast stations, channel 7	QSX 8379.5 kHz
	JNA	JN Tokyo, J	SITOR-A: 1325 tts
	PKB	*Belawan R, INS*	*scheduled*
	PKF	*Ujung Pandang R, INS*	*scheduled*
	SAB 407	Goeteborg R, S	SITOR-A: 24 h tts
	SPB 41	*Szczecin R, POL*	*scheduled*
	WAH	*Saint Thomas R, VIR*	*scheduled*
	9AR	*Rijeka R, HRV*	*scheduled*
8420.0		coast stations, channel 8	QSX 8380.0 kHz
	EAD	Madrid R, E	SITOR-B: 0100 + 0300 + 0500 + 0700 + 0900 + 1100 + 1300 + 1500 + 1700 + 1900 + 2100 + 2300 tfc list
	FFT 41	Saint Lys R, F	SITOR-A: 24 h tts SITOR-B: 0300 + 0400 + 0800 tfc list or wx, 0900 navigational warnings, 1100 + 1200 + 1300 + 1400 + 1500 + 1600 + 1700 tfc list or wx, 1800 navigational warnings, 1900 + 2000 + 2100 + 2300 tfc list or wx CW
	HPP	*Panama R, PNR*	*scheduled*
	SPB 42	*Szczecin R, POL*	*scheduled*
	UBE	*Petropavl.-Km. R, FE, RUS*	*scheduled*
8420.5		coast stations, channel 9	QSX 8380.5 kHz
	CBV	Valparaiso R, CHL	SITOR-A: 0010 + 0258 tts SITOR-B: 0400 tfc list
	HEC 18	Berne R, SUI	SITOR-A: 24 h tts SITOR-B: 0030 + 0230 + 0430 + 0630 + 0830 + 1030 + 1230 + 1430 + 1630 + 1830 + 2030 + 2230 tfc list CW
	HPP	*Panama R, PNR*	*scheduled*
	UUI	*Odessa R, UKR*	*scheduled*

8420.5	9VG 78	Singapore R, SNG	SITOR-A: 24 h tts SITOR-B: 0030 wx, 0130+0330+0530+0730+0930+1130 tfc list, 1230 wx, 1330+1530+1730+1930+2130+2330 tfc list CW
8421.0		coast stations, channel 10	QSX 8381.0 kHz
	A7D	*Doha R, QAT*	*scheduled* CW
	CUL	*Lisbon R, POR*	*scheduled*
	OXZ	Lyngby R, DNK	SITOR-A: 24 h tts SITOR-B: 0130+0330+0530+0730+0930+1130+1330+1530+1730+1930+2130+2330 tfc list CW
	PKF	*Ujung Pandang R, INS*	*scheduled*
	WLO	Mobile R, AL, USA	SITOR-A: 1132+2218-0440 tts CW
	YLQ	Riga R, LVA	SITOR-A: 1803 R tts wtsca
	9WW 20	*Kuching R, Sarawak, MLA*	*scheduled*
8421.5		coast stations, channel 11	QSX 8381.5 kHz
	CBV	Valparaiso R, CHL	SITOR-A: 0357+0438+0442 tts
	LZW 44	Varna R, BUL	SITOR-A: 24 h tts CW
	SVS 4	*Athens R, GRC*	*scheduled*
	UQB	*Kholmsk R, FE, RUS*	*scheduled*
	VRX	Victoria Harbour R, HKG	SITOR-A: 24 h tts SITOR-B: 0000+0400+0800+1200 tfc list CW
	XSQ	*Guangzhou R, CHN*	*scheduled*
	7TK 24	Boufarik R, ALG	SITOR-B: 1430 tfc list
	9AR	Rijeka R, HRV	SITOR-A: 0235-0943+2217 tts CW
8422.0		coast stations, channel 12	QSX 8382.0 kHz
	EQN	*Khomeini R, IRN*	*scheduled*
	ESA	Tallinn R, EST	SITOR-A: 24 h R tts wtsca SITOR-B: 1142+1608+1803 R tts wtsca CW
	IAR	*Rome R, I*	*scheduled*
	NRV	USCG Apra Harbour, GUM	SITOR-A: 0740+0945+1045 tts CW
	UGH	*Provideniya R, FE, RUS*	*scheduled*
	VCT	Tors Cove R, NFLD, CAN	SITOR-A: 1731+1751+2122 tts SITOR-B: 0000 tfc list CW
	9AR	*Rijeka R, HRV*	*scheduled*
8422.5		coast stations, channel 13	QSX 8382.5 kHz
	GKP 4	*Portishead R, G*	*scheduled*
	KPH	San Francisco R, CA, USA	SITOR-A: 1433-0615 tts SITOR-B: 0100+0300 tfc list; 0500 tfc list, wx; 0700+0900+1100+1300+1500+1700 tfc list; 1900 tfc list, wx; 2100+2300 tfc list CW

8422.5	USU	Mariupol R, UKR	SITOR-A: 24 h R tts wtsca SITOR-B: 1600 R navigational warnings wtsca CW
	WCC	*Chatham R, MA, USA*	*scheduled*
	XSQ	*Guangzhou R, CHN*	*scheduled*
8423.0		coast stations, channel 14	QSX 8383.0 kHz
	IAR	Rome R, I	SITOR-A: 0921 tts CW
	KPH	*San Francisco R, CA, USA*	*scheduled*
	LSD 836	*Buenos Aires R, ARG*	*scheduled*
	SVT 4	Athens R, GRC	SITOR-A: 0017+0318+1158+1237+2119+2217 tts SITOR-B: 1620+2020 tfc list CW
	UFL	Vladivostok R, SE, RUS	ITA2 50 Bd: 1130 R tts wtsca
	WCC	Chatham R, MA, USA	SITOR-A: 0017 tts CW
8423.5		coast stations, channel 15	QSX 8383.5 kHz
	CNP	*Casablanca R, MRC*	*scheduled*
	DAN	Norddeich R, D	SITOR-A: 24 h tts CW
	WLO	*Mobile R, AL, USA*	*scheduled*
	ZHH	*Jamestown R, SHN*	*scheduled*
	3AC 28	*Monte Carlo R, MCO*	*scheduled*
	7TK 25	*Boufarik R, ALG*	*scheduled*
8424.0		coast stations, channel 16	QSX 8384.0 kHz
	FFT 42	Saint Lys R, F	SITOR-A: 0018 tts CW
	JOS	*Nagasaki R, J*	*scheduled*
	SVU 4	Athens R, GRC	SITOR-A: 24 h tts SITOR-B: 0330+0815+1430+1815 tfc list CW
	WCC	Chatham R, MA, USA	SITOR-A: 1852-0534 tts SITOR-B: 0040+0240 tfc list; 0440 tfc list, wx; 0640+0840+1040 tfc list; 1240 tfc list, wx; 1440 tfc list; 1640 tfc list, wx; 1840+2040+2240 tfc list CW
	9WH 20	*K. Kinabalu R, Sb., MLA*	*scheduled*
8424.5		coast stations, channel 17	QSX 8384.5 kHz
	HPP	*Panama R, PNR*	*scheduled*
	VRX	Victoria Harbour R, HKG	SITOR-A: 0036+0954 tts CW
	9MG 15	*Georgetown R, Pin. I., MLA*	*scheduled*
	9VG 92	*Singapore R, SNG*	*scheduled*
8425.0		coast stations, channel 18	QSX 8385.0 kHz
	FFT 43	Saint Lys R, F	SITOR-A: 24 h tts CW
	KLB	Seattle R, WA, USA	SITOR-A: 1317 tts CW
	LSD 836	*Buenos Aires R, ARG*	*scheduled*
8425.5		coast stations, channel 19	QSX 8385.5 kHz
	GKY 4	*Portishead R, G*	*scheduled*
	HEC 28	Berne R, SUI	SITOR-A: 24 h tts CW

8425.5	WNU	Slidell R, LA, USA	SITOR-A: 0200-0529 + 1705 tts SITOR-B: 1300 tfc list, 2240 schedule CW
	XSG	*Shanghai R, CHN*	*scheduled*
	ZSC	*Cape Town R, AFS*	*scheduled*
8426.0		coast stations, channel 20	QSX 8386.0 kHz
	EAD	*Madrid R, E*	*scheduled*
	GKL 4	*Portishead R, G*	*scheduled*
	IAR	Rome R, I	SITOR-A: 0614 + 0825 + 1520 + 1936 + 2033 + 2121 tts CW
8426.5		coast stations, channel 21	QSX 8386.5 kHz
	KPH	*San Francisco R, CA, USA*	*scheduled*
	WCC	Chatham R, MA, USA	SITOR-A: 1858-0820 tts SITOR-B: 0040 + 0240 tfc list; 0440 tfc list, wx; 0640 + 0840 + 1040 tfc list; 1240 tfc list, wx; 1440 tfc list; 1640 tfc list, wx; 1840 + 2040 + 2240 tfc list CW
	3AC 38	*Monte Carlo R, MCO*	*scheduled*
	9VG 79	Singapore R, SNG	SITOR-A: 0730-0136 tts CW
8427.0		coast stations, channel 22	QSX 8387.0 kHz
	A7D	*Doha R, QAT*	*scheduled*
	KPH	San Francisco R, CA, USA	SITOR-A: 0045-1900 tts
	OXZ	Lyngby R, DNK	SITOR-A: 24 h tts CW
8427.5		coast stations, channel 23	QSX 8387.5 kHz
	A9M	Hamala R, BHR	SITOR-A: 1608-0316 tts CW
	FFT 44	*Saint Lys R, F*	*scheduled*
	SPA 41	Gdynia R, POL	SITOR-A: 24 h tts SITOR-B: 0900 + 1100 + 1500 tfc list CW
	9WW 20	*Kuching R, Sarawak, MLA*	*scheduled*
8428.0		coast stations, channel 24	QSX 8388.0 kHz
	JFA	*Funabashi F R, J*	*scheduled*
	NMN	USCG Portsmouth, VA, USA	SITOR-A: 1255 + 2007-0657 tts CW
	SAB 424	Goeteborg R, S	SITOR-A: 24 h tts
	TAH	*Istanbul R, TUR*	*scheduled*
	UTQ	*Kiyev R, UKR*	*scheduled*
8428.5		coast stations, channel 25	QSX 8388.5 kHz
	CNP	*Casablanca R, MRC*	*scheduled*
	PCH 46	Scheveningen R, NLD	SITOR-A: 24 h tts SITOR-B: 0115 + 0315 + 0515 + 0715 + 0915 + 1115 + 1315 + 1515 + 1715 + 1915 + 2115 + 2315 tfc list CW
	VAI	CCG Vancouver, BC, CAN	SITOR-A: 0024 + 0132 tts SITOR-B: 0200 + 0230 + 0330 + 0700 + 0730 + 1900 + 1930 wx
	VWM	*Madras R, IND*	*scheduled*

8428.5	ZSC 62	Cape Town R, AFS	SITOR-A: 2226 tts SITOR-B: 0015+0215+0415 tfc list; 0615 tfc list, navigational warnings; 0815 tfc list, 0900 navigational warnings, 0930 wx, 1015+1215+1415+1615 tfc list, 1700 navigational warnings, 1730 wx, 1815+2015+2215 tfc list CW
	9VG 93	*Singapore R, SNG*	*scheduled*
8429.0		coast stations, channel 26	QSX 8389.0 kHz
	EAD	Madrid R, E	SITOR-A: 24 h tts SITOR-B: 0100+0300+0500+0700+0900+1100+1300+1500+1700+1900+2100+2300 tfc list CW
	FFT 45	*Saint Lys R, F*	*scheduled*
	XSQ	*Guangzhou R, CHN*	*scheduled*
8429.5		coast stations, channel 27	QSX 8389.5 kHz
	GKQ 4	*Portishead R, G*	*scheduled*
	IDR 4	IN Rome, I	CW
	UHS	*Murmansk R, RUS*	*scheduled* CW
	VWB	*Mumbai R, IND*	*scheduled*
	XSQ	*Guangzhou R, CHN*	*scheduled*
	YLQ	*Riga R, LVA*	*scheduled*
8430.0		coast stations, channel 28	QSX 8390.0 kHz
	IAR	*Rome R, I*	*scheduled*
	JFA	*Funabashi F R, J*	*scheduled*
	KFS	*San Francisco R, CA, USA*	*scheduled*
	SPA 42	Gdynia R, POL	SITOR-A: 1851 tts SITOR-B: 1850 tfc list CW
	XSG	*Shanghai R, CHN*	*scheduled*
	9VG 39	Singapore R, SNG	SITOR-A: 1426-1744 tts CW
8430.5		coast stations, channel 29	QSX 8390.5 kHz
	WLO	Mobile R, AL, USA	SITOR-A: 2000-0927 tts CW
8431.0		coast stations, channel 30	QSX 8391.0 kHz
	KEJ	Hoolehua R, HWA	SITOR-A: 0159+0744+1054+1328+1638+1643 tts SITOR-B: H+15 tfc list CW
	LZR	*Ruse R, BUL*	*scheduled*
	TAH	Istanbul R, TUR	SITOR-A: 1428+1742 tts
	4PB	*Colombo R, SLK*	*scheduled*
8431.5		coast stations, channel 31	QSX 8391.5 kHz
	UAT	Moscow R, RUS	SITOR-A: 24 h R tts wtsca SITOR-B: 1600 tfc list CW
8432.0		coast stations, channel 32	QSX 8392.0 kHz
	SAB 432	*Goeteborg R, S*	*scheduled*
	WLO	Mobile R, AL, USA	SITOR-A: 0021-0628 tts CW

8432.0	YLQ	Riga R, LVA	SITOR-A: 24 h R tts wtsca SITOR-B: 1030+1305 R tts wtsca, 1415 tfc list, 1430+1541 R tts wtsca CW
8432.5		coast stations, channel 33	QSX 8392.5 kHz
	LZW 45	*Varna R, BUL*	*scheduled*
	UFN	Novorossiysk R, RUS	SITOR-A: 2023-0505 R tts wtsca CW
8433.0		coast stations, channel 34	QSX 8393.0 kHz
	XSG	Shanghai R, CHN	SITOR-A: 1311-2134 tts CW
8433.5		coast stations, channel 35	QSX 8393.5 kHz
	LZR	*Ruse R, BUL*	*scheduled*
8434.0		coast stations, channel 36	QSX 8394.0 kHz
	WLO	Mobile R, AL, USA	SITOR-A: 2213-0928 tts CW
8434.5		coast stations, channel 37	QSX 8394.5 kHz
	LPD	General Pacheco R, ARG	SITOR-A: 2002-1149 tts CW
	SAB 437	Goeteborg R, S	SITOR-A: 0922+0928+1221+1304+2128 tts SITOR-B: 0335+1335+1520 schedule, tfc list CW
	TAH	*Istanbul R, TUR*	*scheduled*
8435.0		coast stations, channel 38	QSX 8395.0 kHz
	VCT	Tors Cove R, NFLD, CAN	SITOR-A: 24 h tts SITOR-B: 0451+1051+1651 wx, 1900 tfc list, 2251 wx CW
	4PB	*Colombo R, SLK*	*scheduled*
8435.5		coast stations, channel 39	QSX 8395.5 kHz
	LPD	*General Pacheco R, ARG*	*scheduled*
	OST 40	Oostende R, BEL	SITOR-A: 24 h tts CW
8436.0		coast stations, channel 40	QSX 8396.0 kHz
	XSG	*Shanghai R, CHN*	*scheduled*
	YLQ	*Riga R, LVA*	*scheduled*
8436.5	WORLDWIDE	COAST STATIONS DSC FREQUENCY	QSX 8415.0 kHz
8437.0	WORLDWIDE	COAST STATIONS DSC FREQUENCY	
	4XZ	IN Haifa, ISR	CW
8437.5	WORLDWIDE	COAST STATIONS DSC FREQUENCY	
8439.0	PBC 38	DN Goeree Island, NLD	ITA2 75 Bd: 24 h ry
8440.0	YIR	Basrah R, IRQ	CW
8440.6	UAT	Moscow R, RUS	CW
8441.0	C5G	Banjul R, GMB	CW
	C6N	Nassau R, BAH	CW
	XYR 7	Yangon R, MYA	CW
	9YL	North Post R, TRD	CW
8441.4	5ZF 2	Mombasa R, KEN	CW
	7OA	Aden R, YEM	CW
	9HD	Valetta R, MLT	CW
8443.0	VFF	CCG Iqaluit, NWT, CAN	CW
8444.0		UNID teleprinter	100
8444.5	KFS	San Francisco R, CA, USA	CW
8445.0	A4M	Muscat R, OMA	CW
	KFS	San Francisco R, CA, USA	CW
	PKK	Kupang R, INS	CW
	PKN 6	Samarinda R, INS	CW

8445.0	PKO	Tarakan R, INS	CW
	S7Q	Victoria R, Mahe, SEY	CW
	XSX	Chi-lung R, TAI	CW
	9AR	Rijeka R, HRV	CW
	9PA	Banana R, ZAI	CW
8445.5	WLO	Mobile R, AL, USA	CW
8446.0	YLQ	Riga R, LVA	CW
8446.4	ZAD 2	Durres R, ALB	CW
8447.0	L2C	ACG Buenos Aires, ARG	CW
	L2W	ACG Com. Rivadavia, ARG	CW
8448.0	A9M	Hamala R, BHR	CW
8449.0	TJC 6	Douala R, CME	CW
	ZKR	Avarua R, Rarotg. I., CKH	CW
	8RB	Demerara R, GUY	CW
		UNID teleprinter	**75**
8449.3	8PO	Bridgetown R, BRB	CW
8450.0	RUF	Sevastopol' R, UKR	CW
	SUZ 4	Serapeum R, EGY	CW
	5AB	Benghazi R, LBY	CW
8450.5	ROD	Murmansk R, RUS	CW
8451.0	UBF	Saint Petersburg R, RUS	CW
	UFH	Petropavl.-Km. R, FE, RUS	CW
	XSG	Shanghai R, CHN	CW
8452.0	7TA 3	El Djaza'ir R, ALG	CW
8452.5	PPO	Olinda R, B	CW
8453.0	CBV	Valparaiso R, CHL	CW
	HWN	**FN Paris, F**	**ITA2 75 Bd: 24 h ry**
	TNA 8	Pointe-Noire R, COG	CW
	VAI	CCG Vancouver, BC, CAN	CW
	XSM	Xiamen R, CHN	CW
8454.0	A9M	Hamala R, BHR	CW
	UIW	**Kaliningrad R, RUS**	**ITA2 50 Bd: 24 h ry or R tts wtsca**
	UVA	Gelendhzik R, RUS	CW
8454.8	9WH 20	K. Kinabalu R, Sb., MLA	CW
8455.0	XSQ	Guangzhou R, CHN	CW
8456.0	VFA	CCG Inuvik, NWT, CAN	CW
8457.0	EDG 3	Madrid R, E	CW
	OFJ 82	Helsinki R, FIN	CW
	PKG	Banjarmasin R, INS	CW
	PKP	Dumai R, INS	CW
	XSP	Shantou R, CHN	CW
8459.0	*NOJ*	*USCG Kodiak, ALS*	*FAX // 4298.0 kHz $*
	XSB 48	Dandong R, CHN	CW
	YQI 4	Constanta R, ROU	CW
8460.0	LZW 4	Varna R, BUL	CW
	PPJ	Juncao R, B	CW
8460.5	PPL	Belem R, B	CW
8461.0	CBA	Antofagasta R, CHL	CW
	CBV	Valparaiso R, CHL	CW
	FJA 8	Papeete R, Tahiti, OCE	CW
	PKD	Surabaya R, INS	CW
	PKR	Semarang R, INS	CW
	YVG	La Guaira R, VEN	CW
	ZSC 42	Cape Town R, AFS	CW
8462.0	PPL	Belem R, B	CW
	PPO	Olinda R, B	CW
8463.0	JOU	Nagasaki R, J	CW
8465.0	OBC	Callao R, PRU	CW
	TUA 4	Abidjan R, CTI	CW
	5RS	Toamasina R, MDG	CW

8465.0	6YI	Kingston R, JMC	CW
		UNID teleprinter	**ITA2 100 encrypted**
8466.0	**UIW**	**Kaliningrad R, RUS**	**ITA2 50 Bd: 1028-1820 R tts wtsca** CW
8467.5	*JJC*	*KYODO Tokyo, J*	*FAX // 4316.0 kHz $*
8469.0	D4A	Mindelo R, S. Vicente, CPV	CW
	D4D	Praia R, Santiago, CPV	CW
	EQI	Abbas R, IRN	CW
8470.0	URL	Sevastopol' R, UKR	CW
	XFL	Mazatlan R, MEX	CW
	XVG 9	Hai Phong R, VTN	CW
8472.0	LZL 4	Bourgas R, BUL	CW
8473.0	EDF 3	Madrid R, E	CW
	HLG	Soul R, KOR	CW
	LYK	Klaipeda R, LTU	CW
	PKE	Amboina R, INS	CW
	PKS	Pontianak R, INS	CW
	SUP	Port Said R, EGY	CW
	4PB	Colombo R, SLK	CW
8473.5	A7D	Doha R, QAT	CW
	WLO	Mobile R, AL, USA	CW
8474.0	HCG	Guayaquil R, EQA	CW
	JYO	Aqaba R, JOR	CW
8475.0	**UHS**	**Murmansk R, RUS**	**ITA2 50 Bd: 0930 + 1510 + 1524 + 1535 R tts wtsca** CW
	UKJ	Astrakhan' R, RUS	CW
8475.5	**FUX**	**FN Le Port, REU**	**ITA2 75 Bd: 1247 clg FAAA, 1535 + 1919 + 2133 ry**
8478.0	CBV	Valparaiso R, CHL	CW
	VIX 4	RAN Canberra, ACT, AUS	CW
8478.5	**FUF**	**FN Fort de France, MRT**	**ITA2 75 Bd: 2044-0952 ry**
8479.0	JCU	Choshi R, J	CW
8480.0	LZW 48	Varna R, BUL	CW
	UAT	**Moscow R, RUS**	**ITA2 50 Bd: 1238 R tts wtsca** CW
	XUK 3	Kompong Som Ville R, CBG	CW
	XVQ	Quang Yen R, VTN	CW
8481.0	PPL	Belem R, B	CW
8482.0	SPH 41	Gdynia R, POL	CW
8484.0	HLJ	Soul R, KOR	CW
8484.5	HZG	Dammam R, ARS	CW
	XSE	Qinhuangdao R, CHN	CW
8484.6		**UNID teleprinter**	**100**
8486.0	IDQ	IN Rome, I	CW
		UNID teleprinter	**100**
8487.0	XSG	Shanghai R, CHN	CW
8489.0	CLS	Habana R, CUB	CW
8490.0	AQP 5	PN Karachi, PAK	CW
	OBF	Mollendo R, PRU	CW
	XSQ	Guangzhou R, CHN	CW
8492.0	JNA	JN Tokyo, J	CW
	PPR	Rio de Janeiro R, B	CW
	9MG 2	Georgetown R, Pin. I., MLA	CW
8492.9		**UNID teleprinter**	**ITA2 75 encrypted**
8493.0	TBA	TN Ankara, TUR	CW
		UNID teleprinter	**ITA2 100 encrypted**
8494.0	**MTI**	**RN Plymouth, G**	**ITA2 75 Bd: 0550-2200 channel status**

8494.0	*NUD*	*USN Adak, ALS*	*FAX // 4855.0 kHz $*
	PPO	Olinda R, B	CW
8496.0	CLA 20	Habana R, CUB	CW
8497.0	EQN	Khomeini R, IRN	CW
	HLJ	Soul R, KOR	CW
8497.5	PPJ	Juncao R, B	CW
8499.0	PPR	Rio de Janeiro R, B	CW
8500.0	**UON**	**Baku R, AZE**	**ITA2 50 Bd: 1930 R tts wtsca** CW
	'RBSL'	**IN Mumbai, IND**	**ITA2 50 Bd: 1129-0314 ry**
8502.0	PPL	Belem R, B	CW
	XSG	Shanghai R, CHN	CW
	YJM 8	Port-Vila R, Efate I., VUT	CW
8504.0	*NMG*	*USCG N. Orleans, LA, USA*	*FAX // 4316.0 kHz $*
8505.0	TBO	TN Izmir, TUR	CW
	UCW	Saint Petersburg R, RUS	CW
	UFZ	Vladivostok R, SE, RUS	CW
	XFK	La Paz R, MEX	CW
8506.0	XSX	Chi-lung R, TAI	CW
	YLQ	Riga R, LVA	CW
8510.7	**'RFFX'**	**MOD Paris, F**	**ARQ-E 72 Bd: 1738-0530 tfc or msg or msg (5lgs) to 'RFFXI' Bangui [XXI]**
8510.0	FFS 4	Saint Lys R, F	CW
	J2A 8	Jibuti R, DJI	CW
	UFC	Nakhodka R, SE, RUS	CW
	VWV	Vishakhapatnam R, IND	CW
8511.0	XSW 2	T'ai-chung R, TAI	CW
8512.0	VHI 4	RAN Darwin, NT, AUS	CW
8514.0	LPD 85	General Pacheco R, ARG	CW
	PBC	**DN Goeree Island, NLD**	**ITA2 75 Bd: 0758 + 0832 + 1147 + 1754 + 2010 encrypted tfc**
	VWB	Mumbai R, IND	CW
	WLO	**Mobile R, AL, USA**	**SITOR-B: H + 35 tfc list, wx** CW
	XFA	Acapulco R, MEX	CW
	XSQ	Guangzhou R, CHN	CW
	9AR	Rijeka R, HRV	CW
8515.0	P2M	Port Moresby R, PNG	CW
	UFL	Vladivostok R, SE, RUS	CW
	5AT	Tripoli R, LBY	CW
8516.0	GKC 4	Portishead R, G	CW
8518.0	ELC	Monrovia R, LBR	CW
	VTR	IN Port Blair, And. Is., IND	CW
8520.0	**UUI**	**Odessa R, UKR**	**ITA2 50 Bd: 1428-1838 R tts wtsca** CW
8520.1	PPO	Olinda R, B	CW
8522.0	CBV	Valparaiso R, CHL	CW
	9WW 20	Kuching R, Sarawak, MLA	CW
8522.5	FFL 4	Saint Lys R, F	CW
8523.4	JOR	Nagasaki R, J	CW
8524.0	DZW	Manila R, PHL	CW
8525.0	WNU	Slidell R, LA, USA	CW
	XSM 4	Quanzhou R, CHN	CW
	9KK 6	Safat R, KWT	CW
8526.0	JMC 4	Tokyo Meteo, J	CW
	PBC	**DN Goeree Island, NLD**	**ITA2 75 Bd: 0832-2010 encrypted tfc**
	VWC	Calcutta R, IND	CW

8527.0	OBY	Paita R, PRU	CW
8528.0	L2E	ACG Buenos Aires, ARG	CW
8528.5	**EBA**	**SN Madrid, E**	**ITA2 75 Bd: 1005+1147+1700+1956 msgs (navigational warnings)** CW
	UUI	Odessa R, UKR	CW
8529.0	HML	Namp'o R, KRE	CW
	PPR	Rio de Janeiro R, B	CW
8530.0	IAR	Rome R, I	CW
	SVJ 4	*Athens R, GRC*	*FAX $* CW
	UIB	Magadan R, FE, RUS	CW
	UJE	Moscow R, RUS	CW
	XSK	Beihai R, CHN	CW
8532.0	LZW 42	Varna R, BUL	CW
8534.0	EQL	Anzali R, IRN	CW
	EQO	Nowshahr R, IRN	CW
	WLO	**Mobile R, AL, USA**	**SITOR-B: H+35 tfc list, wx** CW
	ZPK	Asuncion R, PRG	CW
8534.9		**UNID teleprinter**	**75**
8535.0	ESP	Pärnu R, EST	CW
8536.0	DZE	Mandaluyong R, PHL	CW
8536.5	SVF 4	Athens R, GRC	CW
8538.0	**6WW**	**FN Dakar, SEN**	**ITA2 75 Bd: 0303+0554+1329+1940 ry**
8539.0	VRX	Victoria Harbour R, HKG	CW
8540.0	**USU**	**Mariupol R, UKR**	**ITA2 50 Bd: 0425-2008 R tts wtsca, 1500 R navigational warnings wtsca** CW
8541.0	CLA 79	Habana R, CUB	CW
	LYL	Klaipeda R, LTU	CW
	XSJ	Zhanjiang R, CHN	CW
		UNID teleprinter	**100**
8542.0	PKX	Jakarta R, INS	CW
8543.0	VRX	Victoria Harbour R, HKG	CW
8544.0	JYO	Aqaba R, JOR	CW
	OLP	Prague R, CZE	CW
8545.0	YLN	Riga R, LVA	CW
8545.9	GKA 4	Portishead R, G	CW
8546.0	OBC	Callao R, PRU	CW
	OBF	Mollendo R, PRU	CW
	OBQ	Iquitos R, PRU	CW
	UHK	Batumi R, GEO	CW
	XSY	Hua-lien R, TAI	CW
	9PA	Banana R, ZAI	CW
8548.0	DZF	Bacoor R, PHL	CW
	FUX	**FN Le Port, REU**	**ITA2 75 Bd: 0411 encrypted tfc**
	PPO	Olinda R, B	CW
		UNID teleprinter	**100**
8549.0	**UCE**	**Arkhangelsk R, RUS**	**SITOR-A: 24 h R tts wtsca** **SITOR-B: 1715+2000 tfc list**
8550.0	FFT 4	Saint Lys R, F	CW
8551.6	CTP	NATO Lisbon, POR	CW
8552.0	GKK 4	Portishead R, G	CW
	9WW 20	Kuching R, Sarawak, MLA	CW
8552.6		**UNID teleprinter**	**100**
8554.0	3BM 4	Port Louis R, MAU	CW
8555.0	TBB 7	TN Ankara, TUR	CW

8555.5	UIW	Kaliningrad R, RUS	CW
8556.0	DZP	Novaliches R, PHL	CW
	SAB 44	**Goeteborg R, S**	**SITOR-A: 24 h tts; QSX 8398.5 kHz** **SITOR-B: 1700 Swedish nx**
8556.5	HZG	Dammam R, ARS	CW
8557.0	SPE 41	Szczecin R, POL	CW
8558.4	KFS	San Francisco R, CA, USA	CW
8559.5	GKB 4	Portishead R, G	CW
8562.0	XFE	Ensenada R, MEX	CW
8562.5	XFB	Ciudad del Carmen R, MEX	CW
8564.0	LZL 4	Bourgas R, BUL	CW
8565.0	D3E 51	Luanda R, AGL	CW
8566.0	VTF 4	IN Mumbai, IND	CW
	VTO 4	IN Vishakhapatnam, IND	CW
8567.0	XDA	Mexico City R, MEX	CW
8568.0	**FUV**	**FN Jibuti, DJI**	**ITA2 75 Bd: 0010 + 1756 + 1858 + 2100 + 2137 ry**
8568.5	XFM	Manzanillo R, MEX	CW
8569.0	GKD 4	Portishead R, G	CW
8570.0	LYL	Klaipeda R, LTU	CW
	NRV	USCG Apra Harbour, GUM	CW
	RSGV	Petrozavodsk R, RUS	CW
	WNU	Slidell R, LA, USA	CW
	XVT 5	Da Nang R, VTN	CW
8570.5	UWS	Kiyev R, UKR	CW
8571.0	JNA	JN Tokyo, J	CW
	UFN	**Novorossiysk R, RUS**	**ITA2 50 Bd: 1835 ry, 2225 R tts wtsca** CW
8572.0	TBA	TN Ankara, TUR	CW
	5TA	Nouadhibou R, MTN	CW
8573.0	CLA 21	Habana R, CUB	CW
	UKW	Korsakov R, FE, RUS	CW
8573.5	HSA 4	Bangkok R, THA	CW
8573.6		**UNID teleprinter**	**100**
8573.9	5RS	Toamasina R, MDG	CW
8574.0	HKC	Buenaventura R, CLM	CW
	LGB	Rogaland R, NOR	CW
	XSU	Yantai R, CHN	CW
8575.0	UGC	Saint Petersburg R, RUS	CW
8575.5	XDA	Mexico City R, MEX	CW
8576.0	DZZ	Manila R, PHL	CW
8576.7		**Abu Safa Oilfield, ARS**	**SITOR-A: 0405 msg (situation report)**
8577.0	HLO	Soul R, KOR	CW
8578.0	SUH 3	Alexandria R, EGY	CW
8580.0	DZO	Bulacan R, PHL	CW
	RKLM	Arkhangelsk R, RUS	CW
	URL	Sevastopol' R, UKR	CW
8580.5	XFC	Cozumel R, MEX	CW
8581.6	GKM 4	Portishead R, G	CW
8582.0	XSN	Ningbo R, CHN	CW
	XSW	Kao-hsiung R, TAI	CW
8582.5	KLB	Seattle R, WA, USA	CW
8584.0	DZN	Navotas R, PHL	CW
	VRX	Victoria Harbour R, HKG	CW
8585.0	IRM	CIRM Rome, I	CW
	KUQ	Pago Pago R, SMA	CW
	UFL	Vladivostok R, SE, RUS	CW

8586.0	USO	Izmail R, UKR	CW
	WCC	Chatham R, MA, USA	CW
	XSO	Wenzhou R, CHN	CW
8588.0	4WD	Al Hudaydah R, YEM	CW
8589.0	HPP	Panama R, PNR	CW
8590.0	UIS	Tuapse R, RUS	CW
	VTK	IN Tuticorin, IND	CW
	XVS 8	Ho Chi Minh Ville R, VTN	CW
8591.5	GKG 4	Portishead R, G	CW
8592.0	DZK	Bulacan R, PHL	CW
8593.0	UUI	Odessa R, UKR	CW
8595.0	**UFL**	**Vladivostok R, SE, RUS**	**ITA2 50 Bd: 1146 R tts wtsca** CW
8595.5	XFP	Chetumal R, MEX	CW
	9MG 2	Georgetown R, Pin. I., MLA	CW
8598.0	OXZ 4	Lyngby R, DNK	CW
	XSL	Fuzhou R, CHN	CW
8600.0	ELH	Harbel R, LBR	CW
	UGC	**Saint Petersburg R, RUS**	**ITA2 50 Bd: 0609-1519 R tts wtsca**
	UNI	Ventspils R, LVA	CW
	XSV	Tianjin R, CHN	CW
8601.3	ZLO 4	RNZN Auckland, NZL	CW
8602.0	CWA	Cerrito R, URG	CW
		UNID teleprinter	**100**
8602.5	HPP	Panama R, PNR	CW
8604.0	GKH 4	Portishead R, G	CW
8604.3	ZRH 4	SAN Cape Town, AFS	CW
8604.5	DZJ	Bulacan R, PHL	CW
8605.0	UIW	Kaliningrad R, RUS	CW
8606.0	CBV	Valparaiso R, CHL	CW
	ELZ	Cape Palmas R, LBR	CW
	GKI 4	Portishead R, G	CW
8607.0	LZW	Varna R, BUL	CW
	USU	**Mariupol R, UKR**	**ITA2 50 Bd: 1928+2156 R tts wtsca** CW
8608.0	DZA	Mandaluyong R, PHL	CW
8609.0	CLA 80	Habana R, CUB	CW
8610.0	LZW	Varna R, BUL	CW
	UCE	Arkhangelsk R, RUS	CW
8611.5	TAH	Istanbul R, TUR	CW
8612.0	PPR	Rio de Janeiro R, B	CW
8613.0	XFY	Guaymas R, MEX	CW
8614.0	URL	Sevastopol' R, UKR	CW
	XSJ	Zhanjiang R, CHN	CW
	ZPK	Asuncion R, PRG	CW
8615.0	YLQ	Riga R, LVA	CW
8616.0	JFC	Misaki F R, J	CW
8616.5	URK	Kerch R, UKR	CW
8617.0	LYL	Klaipeda R, LTU	CW
	XSV	Tianjin R, CHN	CW
8618.0	EDZ 4	Madrid R, E	CW
	E3C	Assab R, ERI	CW
	KPH	San Francisco R, CA, USA	CW
	USO	Izmail R, UKR	CW
8619.0	VRX	Victoria Harbour R, HKG	CW
	9WH 20	K. Kinabalu R, Sb., MLA	CW
8620.0	DYP	Cebu R, PHL	CW
	USU	Mariupol R, UKR	CW

8621.0	XFN	Progreso R, MEX	CW
8622.0	PCH 41	Scheveningen R, NLD	CW
	XSF	Lianyungang R, CHN	CW
8623.0	PPJ	Juncao R, B	CW
	5BA	Nicosia R, CYP	CW
8624.0	XSQ	Guangzhóu R, CHN	CW
8625.0	**FUM**	**FN Papeete, Tahiti, OCE**	**ITA2 75 Bd: 0640+0700+1055+1630 ry**
	YKM 7	Al Ladhiqiyah R, SYR	CW
8625.9	**GYU**	**RN Gibraltar, GIB**	**ITA2 75 Bd: 24 h foxes**
8626.0	PKQ	Merak R, INS	CW
	XDA	Mexico City R, MEX	CW
8627.1		**UNID teleprinter**	**75**
8628.0		**UNID teleprinter**	**100**
8629.0	XSD	Yingkou R, CHN	CW
8630.0	A7D	Doha R, QAT	CW
	VWB	Mumbai R, IND	CW
	WCC	Chatham R, MA, USA	CW
8631.0	XFQ	Salina Cruz R, MEX	CW
8632.0	DYV	Iloilo R, PHL	CW
	XSW	Kao-hsiung R, TAI	CW
8632.6		**UNID teleprinter**	**150**
8634.0	PPR	Rio de Janeiro R, B	CW
	SPH 42	Gdynia R, POL	CW
	S9M	Sao Tome R, STP	CW
	VTG 6	IN Mumbai, IND	CW
	XSH	Basuo R, CHN	CW
8635.0	UTQ	Kiyev R, UKR	CW
8636.0	DZU	Pasig R, PHL	CW
	HLW	Soul R, KOR	CW
8638.0	VNG	Sydney TS, NSW, AUS	CW
8640.9		**UNID teleprinter**	**100**
8642.0	D4A	Mindelo R, S. Vicente, CPV	CW
	HIA	Sto. Domingo Pilot R, DOM	CW
	KPH	San Francisco R, CA, USA	CW
8642.2	**MGJ**	**RN Faslane, G**	**ITA2 75 Bd: 0100+0310+0600+1331+1631+2148 channel status**
8642.9		**UNID teleprinter**	**75**
8643.0	UFZ	Vladivostok R, SE, RUS	CW
8643.5	A3A	Nuku'alofa R, TON	CW
	UUI	**Odessa R, UKR**	**ITA2 50 Bd: 0607+1021-1927 R tts wtsca** CW
8645.0	**UAT**	**Moscow R, RUS**	**ITA2 50 Bd: 0412+1830 R tts wtsca** CW
	XSA 2	Nanjing R, CHN	CW
	XVG 6	Hai Phong R, VTN	CW
8646.0	**FUJ**	**FN Noumea, NCL**	**ITA2 75 Bd: 0749-1411 ry**
	LPD 86	General Pacheco R, ARG	CW
	VTP 6	IN Vishakhapatnam, IND	CW
8647.5	JDC	Choshi R, J	CW
8648.0	DZH	Manila R, PHL	CW
8648.5	7TF 6	Boufarik R, ALG	CW
8649.5	IAR	Rome R, I	CW
8650.0	ESA	Tallinn R, EST	CW
	ESP	Pärnu R, EST	CW

8650.0	SPB 43	Szczecin R, POL	SITOR-A: 24 h tts; QSX 8404.5 kHz SITOR-B: 1000 + 1400 + 1600 tfc list, 1755 schedule, 1800 + 2100 + 2200 tfc list CW
	XSL 22	Fangcheng R, CHN	CW
8651.0	HZG	Dammam R, ARS	CW
	XSI	Sanya R, CHN	CW
		UNID teleprinter	200
8651.5	7TF 6	Boufarik R, ALG	CW
8652.0	STP	Port Sudan R, SDN	CW
8652.5	PZN 3	Paramaribo R, SUR	CW
	'C37A'	MOSSAD Tel Aviv, ISR	ARQ-E 288 Bd: 1537 encrypted tfc to '6XM8' BNDVB Bonn
8653.6	JCS	Choshi R, J	CW
8655.0	UAI	Nakhodka R, SE, RUS	ITA2 50 Bd: 1300 R tts wtsca CW
8656.0	IAR	Rome R, I	CW
	XFU	Veracruz R, MEX	CW
8657.0	RPLT	Tuapse R, RUS	CW
8658.0	ASK	Karachi R, PAK	CW
	S3E	Khulna R, BGD	CW
	WLO	Mobile R, AL, USA	CW
8660.0	DZJ	Bulacan R, PHL	CW
8661.0	XSQ	Guangzhou R, CHN	CW
8662.0	TAH	Istanbul R, TUR	CW
8664.0	HMZ	Pyongyang R, KRE	CW
	WSC	Tuckerton R, NJ, USA	CW
8665.0	XSG	Shanghai R, CHN	CW
8666.4	SPH 43	Gdynia R, POL	CW
8668.9		UNID teleprinter	75
8670.0	ASK	Karachi R, PAK	CW
	IAR	Rome R, I	CW
8671.0	XSK 4	Haimen R, CHN	CW
8672.0	DZI	Bacoor R, PHL	CW
8672.8	GYA	RN London, G	ITA2 75 Bd: 1654 channel status
	MGJ	RN Faslane, G	ITA2 75 Bd: 1024 channel status
8674.0	ZPK	Asuncion R, PRG	CW
8674.3		UNID teleprinter	75
8674.4	VWM	Madras R, IND	CW
8675.0	UQB	Kholmsk R, FE, RUS	CW
8676.0	LZS 34	BN Sofia, BUL	CW
8677.0	*CBV*	*Valparaiso R, CHL*	*FAX // 4228.0 kHz*
8677.5	UGC	Saint Petersburg R, RUS	SITOR-A: 24 h R tts wtsca SITOR-B: 0115 tfc list
8678.0	SPH 44	Gdynia R, POL	CW
	XSZ	Dalian R, CHN	CW
	XVS	Ho Chi Minh Ville R, VTN	CW
	ZLP 4	RNZN Auckland, NZL	CW
8680.0	UQB	Kholmsk R, FE, RUS	CW
	WSC	Tuckerton R, NJ, USA	CW
	XUK 3	Kompong Som Ville R, CBG	CW
8681.0	SVI 4	Athens R, GRC	CW
8682.0	EAD 3	Madrid R, E	CW
	J2A 8	Jibuti R, DJI	CW
	NMC	*USCG San Franc., CA, USA*	*FAX // 4346.0 kHz $*
8683.0	UFJ	Rostov-na-Donu R, RUS	CW
8684.0	GKJ 4	Portishead R, G	CW
	LZL 4	Bourgas R, BUL	CW

8685.0	IRM	CIRM Rome, I	CW
8686.0	CNP	Casablanca R, MRC	CW
	C2N	Makwa R, NRU	CW
	HSA 2	Bangkok R, THA	CW
	JCT	Choshi R, J	CW
	PKA	Sabang R, INS	CW
	PKB	Belawan R, INS	CW
	PKF	Ujung Pandang R, INS	CW
8687.0	SVA 4	Athens R, GRC	CW
8687.6	UGC	Saint Petersburg R, RUS	CW
8688.0	WNU	Slidell R, LA, USA	CW
8688.5	ZSC 6	Cape Town R, AFS	CW
8690.0	CLA 22	Habana R, CUB	CW
	FJY 4	Martin de Vivies R, AMS	CW
	JFX	Kagoshima F R, J	CW
	UHS	Murmansk R, RUS	CW
	3DP	Suva R, FJI	CW
	6VA 5	Dakar R, SEN	CW
8691.0	XST	Qingdao R, CHN	CW
8692.5	SVD 4	Athens R, GRC	CW
8694.0	ASK	Karachi R, PAK	CW
	D3E 52	Luanda R, AGL	CW
	PKM	Bitung R, INS	CW
	PKP 2	Teluk Bayur R, INS	CW
	PNK	Jayapura R, INS	CW
	S3D	Chittagong R, BGD	CW
	XSZ	Dalian R, CHN	CW
	XVN 3	Nha Trang R, VTN	CW
8695.0	UHK	Batumi R, GEO	CW
		UNID teleprinter	200
8696.0	9GX	Tema R, GHA	CW
8698.0	C9L 2	Maputo R, MOZ	CW
	C9L 6	Mocambique R, MOZ	CW
	EQM	Bushire R, IRN	CW
	FJP 8	Noumea R, NCL	CW
	UDK	Murmansk R, RUS	CW
	5OW 8	Lagos R, NIG	CW
	7TF 6	Boufarik R, ALG	CW
	9MG 2	Georgetown R, Pin. I., MLA	CW
8700.0	XSY	Hua-lien R, TAI	CW
	9AR	Rijeka R, HRV	CW
8700.4	HKB	Barranquilla R, CLM	CW
8701.0	LYK	Klaipeda R, LTU	ITA2 50 Bd: 0914 + 1540 R tts wtsca, 1901 ry
			CW
8701.5	3AC 18	Monte Carlo R, MCO	CW
8702.0	ODR 3	Beirut R, LBN	CW
	XSR	Haikou R, CHN	CW
8703.0	UCE	Arkhangelsk R, RUS	CW
8704.0	SVB 4	Athens R, GRC	CW
8704.5	UGW	Novorossiysk R, RUS	ITA2 50 Bd: 2051 R tts wtsca
			CW
8705.4	PKC	Palembang R, INS	CW
	PKN	Balikpapan R, INS	CW
	7TF 6	Boufarik R, ALG	CW
8706.0	JOS	Nagasaki R, J	CW
	3CA 7	Malabo R, GNE	CW
8706.4	UWY	Yalta R, UKR	CW
8707.0		coast stations, ch 834	SSB
	CUL	Lisbon R, POR	

8707.0	HKB	Barranquilla R, CLM		
	HKC	Buenaventura R, CLM		
	JNA	JN Tokyo, J		
	UTT	Odessa R, UKR		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
8710.0		coast stations, ch 835	SSB	
	EHY	Madrid R, E		
	HEB 58	Berne R, SUI		
	JNA	JN Tokyo, J		
	LZR	Ruse R, BUL		
	9AR	Rijeka R, HRV		
8713.0		coast stations, ch 836	SSB	
	EHY	Madrid R, E		
	IAR	Rome R, I		
	UFO	Kholmsk R, FE, RUS		
	VZX	Penta R, Gosf., NSW, AUS		
	WLO	Mobile R, AL, USA		
8716.0		coast stations, ch 837	SSB	
	KEJ	Hoolehua R, HWA		
	KGN	Delcambre R, LA, USA		
	LSD 836	Buenos Aires R, ARG		
	SVN 49	Athens R, GRC		
8719.0		coast stations, ch 801	SSB	QSX 8195.0 kHz
	A9M	Hamala R, BHR		
	SAG	Goeteborg R, S		
	S3D	Chittagong R, BGD		
	YQI 41	Constanta R, ROU		
	V5W	Walvis Bay R, NMB		
	ZSC	Cape Town R, AFS		
	4XO	Haifa R, ISR		
	9MG 9	Georgetown R, Pin. I., MLA		
8722.0		coast stations, ch 802	SSB	QSX 8198.0 kHz
	BVA	T'ai-pei R, TAI		
	CUL	Lisbon R, POR		
	D3E	Luanda R, AGL		
	D4A	Mindelo R, S. Vicente, CPV		
	GKT 42	Portishead R, G		
	J5M	Bissau R, GNB		
	LPM	Mar del Plata R, ARG		
	SVN 41	Athens R, GRC		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	VWM	Madras R, IND		
	WOM	Miami R, FL, USA		
	4PB	Colombo R, SLK		
	7TF 37	Boufarik R, ALG		
8725.0		coast stations, ch 803	SSB	QSX 8201.0 kHz
	ASK	Karachi R, PAK		
	EHY	Madrid R, E		
	EQJ	Chah Bahar R, IRN		
	HEB 48	Berne R, SUI		

8725.0	HLS	Soul R, KOR		
	LYL	Klaipeda R, LTU		
	OSU 46	Oostende R, BEL		
	OXZ	Lyngby R, DNK		
	P2M	Port Moresby R, PNG		
	SAG	Goeteborg R, S		
	TAM	Mersin R, TUR		
	WFN	Jeffersonville R, IN, USA		
	ZSC	Cape Town R, AFS		
	ZSQ 23	Port Elizabeth R, AFS		
	6VA	Dakar R, SEN		
8728.0		coast stations, ch 804	SSB	QSX 8204.0 kHz
	A7D	Doha R, QAT		
	EHY	Madrid R, E		
	JYO	Aqaba R, JOR		
	KMI	Dixon R, CA, USA		
	LSD 836	Buenos Aires R, ARG		
	OBC	Callao R, PRU		
	OHG 2	Helsinki R, FIN		
	SPW 41	Warsaw R, POL		
	S9M	Sao Tome R, STP		
	UCY	Astrakhan' R, RUS		
	3AC 8	Monte Carlo R, MCO		
	9LL	Freetown R, SRL		
	9VG 63	Singapore R, SNG		
8731.0		coast stations, ch 805	SSB	QSX 8207.0 kHz
	E3C	Assab R, ERI		
	FJP 9	Noumea R, NCL		
	HCG	Guayaquil R, EQA		
	OSU 43	Oostende R, BEL		
	P2M	Port Moresby R, PNG		
	TFA	Reykjavik R, ISL		
	UAT	Moscow R, RUS		
	UCZ	Provideniya R, FE, RUS		
	UIK	Vladivostok R, SE, RUS		
	WOM	Miami R, FL, USA		
	ZAD	Durres R, ALB		
	ZSC 26	Cape Town R, AFS		
	4XO	Haifa R, ISR		
8734.0		coast stations, ch 806	SSB	QSX 8210.0 kHz
	A9M	Hamala R, BHR		
	HSA	Bangkok R, THA		
	IAR	Rome R, I		
	KUQ	Pago Pago R, SMA		
	LPL	General Pacheco R, ARG		
	OSU 44	Oostende R, BEL		
	SPW 42	Warsaw R, POL		
	SVN 42	Athens R, GRC		
	S3D	Chittagong R, BGD		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
		Abidjan F R, CTI		
8737.0		coast stations, ch 807	SSB	QSX 8213.0 kHz
	CLA 63	Habana R, CUB		
	TFA	Reykjavik R, ISL		
	UGC	Saint Petersburg R, RUS		

8737.0	UIW	Kaliningrad R, RUS		
	VAI	CCG Vancouver, BC, CAN		
	VIM	Melbourne R, VIC, AUS		
	ZBI	Georgetown R, ASC		
	ZHH	Jamestown R, SHN		
	5BA 42	Nicosia R, CYP		
	5RS	Toamasina R, MDG		
	8Q2	Male R, MLD		
	9KK 7	Safat R, KWT		
	9WH 20	K. Kinabalu R, Sb., MLA		
8740.0		coast stations, ch 808	SSB	QSX 8216.0 kHz
	DYO	Cebu R, PHL		
	DZO	Bulacan R, PHL		
	DZZ	Manila R, PHL		
	HZG	Dammam R, ARS		
	LPW	Bahia Blanca R, ARG		
	OXZ	Lyngby R, DNK		
	PZN	Paramaribo R, SUR		
	SVN 43	Athens R, GRC		
	WOO	Ocean Gate R, NJ, USA		
	YKM 7	Al Ladhiqiyah R, SYR		
	ZSD 38	Durban R, AFS		
	4PB	Colombo R, SLK		
8743.0		coast stations, ch 809	SSB	QSX 8219.0 kHz
	ASK	Karachi R, PAK		
	CLA 64	Habana R, CUB		
	DZA	Mandaluyong R, PHL		
	KMI	Dixon R, CA, USA		
	LFL 5	Rogaland R, NOR		
	SVN 44	Athens R, GRC		
	TFA	Reykjavik R, ISL		
	XFA	Acapulco R, MEX		
	XFB	Ciudad del Carmen R, MEX		
	XFC	Cozumel R, MEX		
	3AC 9	Monte Carlo R, MCO		
	7TF 38	Boufarik R, ALG		
	9KK 72	Safat R, KWT		
8746.0		coast stations, ch 810	SSB	QSX 8222.0 kHz
	EHY	Madrid R, E		
	EQM	Bushire R, IRN		
	JBO	Tokyo R, J		
	LPX	Com. Rivadavia R, ARG		
	LZW	Varna R, BUL		
	PKB	Belawan R, INS		
	PKN	Balikpapan R, INS		
	SPO 41	Szczecin R, POL		
	S3D	Chittagong R, BGD		
	TAH	Istanbul R, TUR		
	TAT	Canakkale R, TUR		
	WOM	Miami R, FL, USA		
	XSQ	Guangzhou R, CHN		
	3DP	Suva R, FJI		
	9AR	Rijeka R, HRV		
	9WW 20	Kuching R, Sarawak, MLA		
8749.0		coast stations, ch 811	SSB	QSX 8225.0 kHz
	HZG	Dammam R, ARS		
	LFL 7	Rogaland R, NOR		
	LPL	General Pacheco R, ARG		
	OBF	Mollendo R, PRU		
	OBQ	Iquitos R, PRU		

8749.0	OBY	Paita R, PRU		
	OXZ	Lyngby R, DNK		
	TAH	Istanbul R, TUR		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	VRX	Victoria Harbour R, HKG		
	WOO	Ocean Gate R, NJ, USA		
8752.0		coast stations, ch 812	SSB	QSX 8228.0 kHz
	BVA	T'ai-pei R, TAI		
	DZJ	Bulacan R, PHL		
	DZF	Bacoor R, PHL		
	JBO	Tokyo R, J		
	LPG	Rio Gallegos R, ARG		
	LYK	Klaipeda R, LTU		
	OSU 49	Oostende R, BEL		
	PKX	Jakarta R, INS		
	SPC 41	Gdynia R, POL		
	UFA	Batumi R, GEO		
	VFF	CCG Iqaluit, NWT, CAN		
	XSG	Shanghai R, CHN		
	YLQ	Riga R, LVA		
	ZLA	Awanui R, NZL		
	4XO	Haifa R, ISR		
	6YI	Kingston R, JMC		
	9PA	Banana R, ZAI		
8755.0		coast stations, ch 813	SSB	QSX 8231.0 kHz
	BVA	T'ai-pei R, TAI		
	CUB	Funchal R, MDR		
	CUL	Lisbon R, POR		
	D4A	Mindelo R, S. Vicente, CPV		
	J5M	Bissau R, GNB		
	LFL 8	Rogaland R, NOR		
	OSU 45	Oostende R, BEL		
	VWB	Mumbai R, IND		
	XSL	Fuzhou R, CHN		
	XSV	Tianjin R, CHN		
	XVT	Da Nang R, VTN		
	XYR	Yangon R, MYA		
	YKO	Tartous R, SYR		
	7TF 39	Boufarik R, ALG		
	9WH 20	K. Kinabalu R, Sb., MLA		
8758.0		coast stations, ch 814	SSB	QSX 8234.0 kHz
	CLA 67	Habana R, CUB		
	DZJ	Bulacan R, PHL		
	HSA 21	Bangkok R, THA		
	IAR	Rome R, I		
	JBO	Tokyo R, J		
	KMI	Dixon R, CA, USA		
	LPW	Bahia Blanca R, ARG		
	LPZ	Trelew R, ARG		
	SVN 46	Athens R, GRC		
	S9M	Sao Tome R, STP		
	T3C	Takaronga R, T. Atl., KIR		
	WOM	Pennsuco R, FL, USA		
8761.0		coast stations, ch 815	SSB	QSX 8237.0 kHz
	ESA	Tallinn R, EST		

8761.0	JYO	Aqaba R, JOR		
	OSU 41	Oostende R, BEL		
	UDN	Novorossiysk R, RUS		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	WOO	Ocean Gate R, NJ, USA		
	XSQ	Guangzhou R, CHN		
	YIR	Basrah R, IRQ		
	9PA	Banana R, ZAI		
	9VG 64	Singapore R, SNG		
8764.0		coast stations, ch 816	SSB	QSX 8240.0 kHz
	EHY	Madrid R, E		
	GKU 46	Portishead R, G		
	LPX	Com. Rivadavia R, ARG		
	NMA	USCG Miami, FL, USA		
	NMC	USCG S. Franc., CA, USA		
	NMF	USCG Boston, MA, USA		
	NMG	USCG N. Orleans, LA, USA		
	NMN	USCG Portsmouth, VA, USA		
	NMO	USCG Honolulu, HWA		
	PKG	Banjarmasin R, INS		
	PKP	Dumai R, INS		
	XSR	Haikou R, CHN		
	XSU	Yantai R, CHN		
	XSV	Tianjin R, CHN		
	8PO	Bridgetown R, BRB		
8767.0		coast stations, ch 817	SSB	QSX 8243.0 kHz
	C2N	Makwa R, NRU		
	DZA	Mandaluyong R, PHL		
	DZI	Bacoor R, PHL		
	EQO	Nowshahr R, IRN		
	FFL 43	Saint Lys R, F		
	HPP 20	Panama R, PNR		
	SUH	Alexandria R, EGY		
	S3E	Khulna R, BGD		
	UAT	Moscow R, RUS		
	UEO	Nakhodka R, SE, RUS		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	XFK	La Paz R, MEX		
	XFM	Manzanillo R, MEX		
	XFP	Chetumal R, MEX		
	XFQ	Salina Cruz R, MEX		
8770.0		coast stations, ch 818	SSB	QSX 8246.0 kHz
	ASK	Karachi R, PAK		
	BVA	T'ai-pei R, TAI		
	LPG	Rio Gallegos R, ARG		
	LZL	Bourgas R, BUL		
	LZW	Varna R, BUL		
	OXZ	Lyngby R, DNK		
	S7Q	Victoria R, Mahe, SEY		
	TJC	Douala R, CME		

8770.0	USO	Izmail R, UKR		
	XSG	Shanghai R, CHN		
	YJM	Port-Vila R, Efate I., VUT		
	5AT	Tripoli R, LBY		
	5BA 44	Nicosia R, CYP		
	9MG 9	Georgetown R, Pin. I., MLA		
8773.0		coast stations, ch 819	SSB	QSX 8249.0 kHz
	A3A	Nuku'alofa R, TON		
	GNI	Niton R, G		
	HPP 20	Panama R, PNR		
	IAR	Rome R, I		
	PPC	Itajai R, B		
	PPJ	Juncao R, B		
	PPL	Belem R, B		
	PPM	Manaus R, B		
	PPO	Olinda R, B		
	PPR	Rio de Janeiro R, B		
	PPT	Santarem R, B		
	SVN 47	Athens R, GRC		
	UIW	Kaliningrad R, RUS		
	7OA	Aden R, YEM		
8776.0		coast stations, ch 820	SSB	QSX 8252.0 kHz
	DYV	Iloilo R, PHL		
	DZO	Bulacan R, PHL		
	D4D	Praia R, Santiago, CPV		
	IAR	Rome R, I		
	JBO	Tokyo R, J		
	LPX	Comodoro Rivadavia R, ARG		
	SVN 48	Athens R, GRC		
	5BA 46	Nicosia R, CYP		
	5WA	Apia R, SMO		
	9PA	Banana R, ZAI		
8779.0		coast stations, ch 821 (WORLDWIDE CALLING FREQ.)	SSB	QSX 8255.0 kHz
8782.0		coast stations, ch 822	SSB	QSX 8258.0 kHz
	BVA	T'ai-pei R, TAI		
	GKU 42	Portishead R, G		
	HEB 18	Berne R, SUI		
	KMI	Dixon R, CA, USA		
	PPC	Itajai R, B		
	PPL	Belem R, B		
	PPR	Rio de Janeiro R, B		
	S3E	Khulna R, BGD		
	TUA	Abidjan R, CTI		
	UTQ	Kiyev R, UKR		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	XSQ	Guangzhou R, CHN		
	5ZF	Mombasa R, KEN		
	9AR	Rijeka R, HRV		
8785.0		coast stations, ch 823	SSB	QSX 8261.0 kHz
	A3A	Nuku'alofa R, TON		
	IAR	Rome R, I		
	LGQ	Rogaland R, NOR		
	LPM	Mar del Plata R, ARG		
	OXZ	Lyngby R, DNK		

8785.0	SAG	Goeteborg R, S		
	UGE	Arkhangelsk R, RUS		
	XVG 4	Hai Phong R, VTN		
	YIR	Basrah R, IRQ		
8788.0		coast stations, ch 824	SSB	QSX 8264.0 kHz
	A4M	Muscat R, OMA		
	BVA	T'ai-pei R, TAI		
	HEB 28	Berne R, SUI		
	OBY	Paita R, PRU		
	PPC	Itajai R, B		
	PPJ	Juncao R, B		
	PPO	Olinda R, B		
	PPT	Santarem R, B		
	SPC 42	Gdynia R, POL		
	UHY	Murmansk R, RUS		
	VIM	Melbourne R, VIC, AUS		
	WLO	Mobile R, AL, USA		
	9VG 65	Singapore R, SNG		
8791.0		coast stations, ch 825	SSB	QSX 8267.0 kHz
	DYP	Cebu R, PHL		
	FFL 42	Saint Lys R, F		
	FJY 4	Martin de Vivies R, AMS		
	LPG	Rio Gallegos R, ARG		
	OXZ	Lyngby R, DNK		
	SAG	Goeteborg R, S		
	UBE	Petropavl.-Km. R, FE, RUS		
	VFR	CCG Resolute, NWT, CAN		
	WOM	Miami R, FL, USA		
	ZKR	Avarua R, Rarotg. I., CKH		
	7TF 40	Boufarik R, ALG		
	8PO	Bridgetown R, BRB		
	9GX	Tema R, GHA		
8794.0		coast stations, ch 826	SSB	QSX 8270.0 kHz
	A7D	Doha R, QAT		
	GKV 46	Portishead R, G		
	HKB	Barranquilla R, CLM		
	HKC	Buenaventura R, CLM		
	IAR	Rome R, I		
	PCG 41	Scheveningen R, NLD		
	PKA	Sabang R, INS		
	PKD	Surabaya R, INS		
	PKE	Amboina R, INS		
	PKK	Kupang R, INS		
	VFA	CCG Inuvik, NWT, CAN		
	WLC	Rogers City R, MI, USA		
	WOO	Ocean Gate R, NJ, USA		
	XDA	Mexico City R, MEX		
	XFE	Ensenada R, MEX		
	XFL	Mazatlan R, MEX		
	XSV	Tianjin R, CHN		
8797.0		coast stations, ch 827	SSB	QSX 8273.0 kHz
	EQN	Khomeini R, IRN		
	HLS	Soul R, KOR		
	J2A	Jibuti R, DJI		
	LPL	General Pacheco R, ARG		
	OBF	Mollendo R, PRU		
	OXZ	Lyngby R, DNK		
	SAG	Goeteborg R, S		
	S3D	Chittagong R, BGD		
	VCT	Tors Cove R, NFLD, CAN		

8797.0	YUW	Bar R, SRB		
	4XO	Haifa R, ISR		
8800.0		coast stations, ch 828	SSB	QSX 8276.0 kHz
	CNP	Casablanca R, MRC		
	DZD	Manila R, PHL		
	ELH	Harbel R, LBR		
	FFL 44	Saint Lys R, F		
	JFA	Funabashi F R, J		
	ODR 7	Beirut R, LBN		
	PKF	Ujung Pandang R, INS		
	PKN 6	Samarinda R, INS		
	PKR	Semarang R, INS		
	PNK	Jayapura R, INS		
	PPJ	Juncao R, B		
	PPO	Olinda R, B		
	PPR	Rio de Janeiro R, B		
	TJC	Douala R, CME		
	3BB	Port Louis Harbour R, MAU		
8803.0		coast stations, ch 829	SSB	QSX 8279.0 kHz
	BVA	T'ai-pei R, TAI		
	FJA	Papeete R, Tahiti, OCE		
	OHG 2	Helsinki R, FIN		
	OSU 42	Oostende R, BEL		
	S3E	Khulna R, BGD		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	WLO	Mobile R, AL, USA		
	XDA	Mexico City R, MEX		
	XFN	Progreso R, MEX		
	XFU	Veracruz R, MEX		
	XFY	Guaymas R, MEX		
	XSG	Shanghai R, CHN		
	ZPB	Asuncion R, PRG		
	5AB	Benghazi R, LBY		
	5BA 48	Nicosia R, CYP		
	8Q2	Male R, MLD		
	9WW 20	Kuching R, Sarawak, MLA		
8806.0		coast stations, ch 830	SSB	QSX 8282.0 kHz
	C5G	Banjul R, GMB		
	FFL 41	Saint Lys R, F		
	LZR	Ruse R, BUL		
	OBQ	Iquitos R, PRU		
	PKC	Palembang R, INS		
	PKC 4	Panjang R, INS		
	PKM	Bitung R, INS		
	PKT	Dili R, INS		
	PPC	Itajai R, B		
	PPL	Belem R, B		
	PPM	Manaus R, B		
	PPR	Rio de Janeiro R, B		
	SPO 42	Szczecin R, POL		
	WLO	Mobile R, AL, USA		
	XSG	Shanghai R, CHN		
	9AR	Rijeka R, HRV		
8809.0		coast stations, ch 831	SSB	QSX 8285.0 kHz
	ASK	Karachi R, PAK		

8809.0	BVA	T'ai-pei R, TAI		
	GNI	Niton R, G		
	HEB 38	Berne R, SUI		
	IAR	Rome R, I		
	TAH	Istanbul R, TUR		
	TFA	Reykjavik R, ISL		
	WOM	Miami R, FL, USA		
	5RS	Toamasina R, MDG		
	9MG 33	Georgetown R, Pin. I., MLA		
8812.0		coast stations, ch 832	SSB	QSX 8288.0 kHz
	A7D	Doha R, QAT		
	CWF	Punta Carretas R, URG		
	LZW	Varna R, BUL		
	PPM	Manaus R, B		
	TAH	Istanbul R, TUR		
	VRX	Victoria Harbour R, HKG		
	9HD	Valetta R, MLT		

8815.0 - 8965.0 AERONAUTICAL MOBILE (R)

8816.0		AMS = 4A 6G 12C 13J 14A	SSB	
8819.0		AMS = 2B 2C 9B 10 13C	SSB	
8822.0		AMS = 2A 3B 5A 5C 11B 13G 14	SSB	
8825.0		AMS = NAT, 6G 13H 14F	SSB	
8828.0		AMS = 1D 13N, VPAC	SSB	
8831.0		AMS = NAT, 6G 13F 14F	SSB	
8834.0		AMS = 2B 2C 6C 7C 10 13C	SSB	
8837.0		AMS = 3A 3C 4A 9B 10B 13M	SSB	
8840.0		AMS = 1C 6	SSB	
8843.0		AMS = CEP, 5D 6G 10E 13C 13J 13K 14D	SSB	
8846.0		AMS = CAR, 2 3 7F 9	SSB	
8849.0		AMS = 13K, VSEA	SSB	
8852.0		AMS = 3B 3C 9 12E, VAFI	SSB	
8855.0		AMS = SAM, 2 10A 14	SSB	
8858.0		AMS = 4A 6G 10D 13E 13F 14D	SSB	
8861.0		AMS = SAT, 3A 3B 6E 9B	SSB	
8864.0		AMS = NAT, 2B 6B 6F 7E 13F	SSB	
8867.0		AMS = SP, 6G 10C 13D 13M	SSB	
8870.0		AMS = 5 6G 14, VNAT	SSB	
8873.0		AMS = 4 6G 9C 9D 12E 12F 13I	SSB	
8876.0		AMS = 2A 10A 12D 14G	SSB	
8879.0		AMS = INO NAT, 3B	SSB	
8882.0		AMS = 2C 6D	SSB	
8885.0		AMS = 5 6B 11B 13G 14C	SSB	
		UNID teleprinter	200	
8888.0		AMS = 2 6G 7	SSB	
8891.0		AMS = NAT, 6A 14E	SSB	
8894.0		AMS = AFI, 3C 12F 14A	SSB	
8897.0		AMS = EA	SSB	
8900.0		AMS = 3A 10D 13G 14B	SSB	

8903.0		AMS = AFI CWP, 10B 13M	SSB
8906.0		AMS = NAT, 6A 6E 7B 9B 13H	SSB
8909.0		AMS = 2A 6E	SSB
8912.0		AMS = 5B 6G 11B 13D 14C	SSB
8915.0		AMS = 3C 5A	SSB
8918.0		AMS = CAR MID, 6C	SSB
8921.0		AMS = W I/III	SSB
8924.0		AMS = W I/IV	SSB
8927.0		AMS = W II/V	SSB
8930.0		AMS = W I/III	SSB
8933.0		AMS = W II/V	SSB
8936.0		AMS = W I/II	SSB
8939.0		AMS = 2A 2C 6F 10B 13C	SSB
8942.0		AMS = SEA, 3A	SSB
8945.0		AMS = 10F 13K 13E, VMID	SSB
8948.0		AMS = 6A 12C	SSB
8951.0		AMS = MID	SSB
8954.0		AMS = 3 10E 12J 14B	SSB
8957.0		AMS = 3B 6D 12C 13D 14G, VEUR	SSB
8960.0		AMS = 6G 7F	SSB
	GKX	Portishead Air, G	SSB
8964.0	AFA	USAF Andrews, MD, USA	SSB
	AFE	USAF MacDill, FL, USA	SSB
	AFE 83	USAF Wideawake, ASC	SSB
	AGA	USAF Hickam AFB, HWA	SSB
	CUW	PAF/USAF Lajes AFB, AZR	SSB

8965.0 - 9040.0 AERONAUTICAL MOBILE (OR)

8965.0		AMS	SSB
	AXK	RAAF East Sale, VIC, AUS	
8968.0		AMS	SSB
	AFA	USAF Andrews, MD, USA	
	AFE	USAF MacDill, FL, USA	
	AFE 83	USAF Wideawake, ASC	
	AFH	USAF A. AFB, Balboa, PNR	
	AFI	USAF McClellan, CA, USA	
	AFS	USAF Offutt AFB, NE, USA	
	AGA	USAF Hickam AFB, HWA	
	AIE	USAF Andersen AFB, GUM	
	AIF	USAF Yokota, J	
	CUW	PAF/USAF Lajes AFB, AZR	
	XPH	USAF Thule AFB, GRL	
8971.0		AMS	SSB
8974.0		AMS	SSB
	AXF	RAAF Sydney, NSW, AUS	
	AXH	RAAF Townsv., QLD, AUS	
	AXI	RAAF Darwin, NT, AUS	
	AXJ	RAAF Perth, WA, AUS	
	AXX	RAAF Brisbane, QLD, AUS	
	ZKX	RNZAF Auckland, NZL	
8977.0		AMS	SSB
	AXF	RAAF Sydney, NSW, AUS	
	AXH	RAAF Townsv., QLD, AUS	
	AXI	RAAF Darwin, NT, AUS	
	AXJ	RAAF Perth, WA, AUS	

8977.0	AXR	RAAF Richmond, NSW, AUS	
	ZKX	RNZAF Auckland, NZL	
8980.0		AMS	SSB
8983.0		AMS	SSB
		many USCG stations	
8986.0		AMS	SSB
8987.0	MKL	RAF Edinburgh, G	CW
8988.0		UNID teleprinter	75
8989.0		AMS	SSB
	AXF	RAAF Sydney, NSW, AUS	
	CHR	CF Trenton, ONT, CAN	
		many USAF stations	
8992.0		AMS	SSB
	CSE	PAF Lisbon, POR	
		IAF Rome, I	
		many USAF stations	
		PAF Porto Santo, MDR	
8993.0	GXW	RN Portland, G	SSB
8995.0		AMS	SSB
8998.0		AMS	SSB
	NGD	USN McMurdo Sound, ATA	
	ZKX	RNZAF Auckland, NZL	
9001.0		AMS	SSB
9003.0	JYJ	RJ Amman, JOR	SSB
9004.0		AMS	SSB
	'HCBSNSA'	UNO Sarajevo, BIH	SSB
	'HCHRVME'	UNO Metkovic, HRV	SSB
	'HCHRVSJ'	UNO Senj, HRV	SSB
	'HCHRVZA'	UNO Zagreb, HRV	SSB
	'HCSWIGE'	UNO Geneva, SUI	PACTOR: 1544 tfc
9007.0		AMS	SSB
	AXF	RAAF Sydney, NSW, AUS	
	AXH	RAAF Townsv., QLD, AUS	
	CFH	CF Halifax, NS, CAN	
	CHR	CF Trenton, ONT, CAN	
	CJX	CF St. John's, NFLD, CAN	
	VXA	CF Edmonton, ALTA, CAN	
9009.0		many BAF stations, B	SSB
9010.0		AMS	SSB
	CFH	CF Halifax, NS, CAN	
	CHR	CF Trenton, ONT, CAN	
	CJX	CF St. John's, NFLD, CAN	
	VXA	CF Edmonton, ALTA, CAN	
	ZKX	RNZAF Auckland, NZL	
9011.0	AFA	USAF Andrews, MD, USA	SSB
	AJE	USAF Croughton, G	SSB
9013.0		AMS	SSB
	LWB	AA Buenos Aires, ARG	
9014.0	AFA	USAF Andrews, MD, USA	SSB
	AFE	USAF MacDill, FL, USA	SSB
	AFI	USAF McClellan, CA, USA	SSB
		many RAN stations, AUS	SSB
9016.0		AMS	SSB
	AFA	USAF Andrews, MD, USA	
	AFE	USAF MacDill, FL, USA	
	AFI	USAF McClellan, CA, USA	
	AFS	USAF Offutt AFB, NE, USA	
	AGA	USAF Hickam AFB, HWA	
	AIE	USAF Andersen AFB, GUM	
9019.0		AMS	SSB

9022.0		AMS	SSB
9023.0	AFA	USAF Andrews, MD, USA	SSB
	AXF	RAAF Sydney, NSW, AUS	SSB
	AXJ	RAAF Perth, WA, AUS	SSB
	AXR	RAAF Richmond, NSW, AUS	SSB
	CHR	CF Trenton, ONT, CAN	SSB
	CUW	PAF/USAF Lajes AFB, AZR	SSB
	VXA	CF Edmonton, ALTA, CAN	SSB
9024.0	ZKX	RNZAF Auckland, NZL	ITA2 75 Bd: 0000 ry
9025.0		AMS	SSB
9028.0		AMS	SSB
9029.0		UNID teleprinter	CIS 10-11-11 MFSK
9031.0		AMS	SSB
	GFW	RAF Akrotiri, CYP	
	MLU	RAF Gibraltar, GIB	
	MQP	RAF Upavon, G	
		RAF Wideawake, ASC	
9034.0		AMS	SSB
		LAN Santiago, CHL	
9035.0	OWD	DAF Vaerloese, DNK	SSB
		PA Apia, SMO	SSB
		PA Faleolo, SMO	SSB
9037.0		AMS	SSB
9040.0 - 9400.0		**FIXED**	
9040.0		Sydney Air, NSW, AUS	SSB
9041.0	5YE	Nairobi Meteo, KEN	ITA2 100 Bd: 1104-0447 ry or wx CW
9043.0	AFA	USAF Andrews, MD, USA	SSB
	AFE 70	USAF Cape Can., FL, USA	SSB
9045.0	*5YE*	*Nairobi Meteo, KEN*	*FAX // 7465.0 kHz $*
9046.0		UNID teleprinter	ITA2 75 encrypted
9047.0		UNID teleprinter	75
9050.0	*AOK*	*USN Rota, E*	*FAX // 7595.0 kHz $*
9057.0	AFA	USAF Andrews, MD, USA	SSB
	AFI	USAF McClellan, CA, USA	SSB
	AGA	USAF Hickam AFB, HWA	SSB
	'DFZG'	MFA Belgrade, SRB	FEC-A 144 Bd: 1200 tfc ITA2 75 Bd: 1400 ry, 1408 encrypted tfc
9060.0	GYA	RN London, G	ITA2 75 Bd: 1541 s. on with clg MTT
9063.3	'DOR'	MFA Sofia, BUL	IRA 300 Bd: 0644 encrypted tfc, 1335 final msg, s. off; 1440 encrypted tfc
9065.8		UNID teleprinter	75
9066.0		Polish E Moscow, RUS	POL-ARQ 100 Bd: 1205 tfc to SNN 299 Warsaw, s. off; 1515 msgs to SNN 299
9075.0	'P6Z'	MFA Paris, F	FEC-A 192 Bd: 1516 msgs (5lgs) after "BBBB" to SRZ 944 Warsaw, 1605 msg (5lgs) after "BBBB" to 'J5W' Rabat [DEB]
		UNID teleprinter	100
9076.7	'RFFA'	MOD Paris, F	ARQ-E3 192 Bd: 1730-0554 "controle de voie" or msg (5lgs) to 'RFTJD' Libreville [ITF]

9079.7	'RFQP'	FF Jibuti, DJI	ARQ-E3 100 Bd: 1105+1647-0236 tfc or msgs or "controle de voie" to 'RFVI' Le Port [DJI]
9081.9		MFA Oslo, NOR	TWINPLEX YYBB BYBY SITOR-A: 0800+0955 encrypted tfc
9085.0	'G8T'	French E Belgrade, SRB	FEC-A 192 Bd: 1517 msgs to 'P6Z' Paris
9085.5		MFA Rome, I	SITOR-A: 1453 msg (5lgs) to Belgrade
9086.0		UNID station (196)	ARQ-E 288 Bd: 1030 encrypted tfc
9087.5		MFA Rome, I	SITOR-A: 0745+0809 msgs (5lgs), 1026 tfc, 1430 msgs (5lgs)
9090.0	*AOK*	*USN Rota, E*	*FAX // 7595.0 kHz $*
	NPG	*USN S. Franc., CA, USA*	*FAX // 4855.0 kHz $*
		UNID teleprinter	ITA2 75 encrypted
9090.5		MFA Rome, I	SITOR-A: 0824-1340 tfc or msg or msg (5lgs)
9093.6		UNID teleprinter	100
9098.6		UNID teleprinter	150
9100.6		UNID teleprinter	MFSK
9102.7		Egyptian E Khartoum, SDN	SITOR-A: 1740+1755 msgs (5lgs) to Cairo
9105.0		UNID teleprinter	100
9106.0	ZHF 33	BAS Signy, Coron. I., ATA	SSB
	ZHF 44	BAS Argentine Is., FLK	SSB
	ZHF 45	BAS Rothera, ATA	SSB
9108.0	'DOR'	MFA Sofia, BUL	IRA-ARQ 150 Bd: 1358 tfc
	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 1040 msg, 1647 tfc
		Polish E Den Haag, NLD	POL-ARQ 200 Bd: 0811-1321 tfc or msgs or msg (5fgs) to SNN 299 Warsaw
9110.0	*NMF*	*USCG Boston, MA, USA*	*FAX // 6340.5 kHz $*
9111.7		Egyptian E Bonn, D	SITOR-A: 1845 msg (5lgs) to Cairo
9114.0	HGG 31	MTI Budapest, HNG	ITA2 50 Bd: 1000+1100+1700 E nx
9115.0		YEMENIA San'a, YEM	SSB
9117.5	PCW 1	MFA Den Haag, NLD	SITOR-A: 1154 tfc CW
9118.5	7RQ 20	MFA El Djaza'ir, ALG	Coquelet 8: 1340 encrypted tfc, 1436 tfc
9122.5		many USACE stations, USA	SSB
9123.0		UNID teleprinter	75
9126.7	'RFTJD'	FF Libreville, GAB	ARQ-E3 192 Bd: 1918-0440 tfc or "controle de voie" to 'RFFA' Paris [FTI]
9130.0	GYA	RN London, G	ITA2 75 Bd: 1659 channel status
	MGJ	RN Faslane, G	ITA2 75 Bd: 1847-2249 channel status
		UNID station (796)	CIS-14 100 Bd: A/B: 0930 R tfc wca
9132.0		Polish E Cologne, D	POL-ARQ 100 Bd: 0827+1243 msgs + msgs (5fgs) to SNN 299 Warsaw, 1307 tfc to SNN 299
9141.8		UNID teleprinter	100
9147.0	GYE	RN London, G	VFT: ITA2 75 Bd: 0750+1837 encrypted tfc VFT: ARQ-M2 96 Bd: A: 0750+1836 wx
9150.0	*RCH 73*	*Tashkent Meteo, UZB*	*FAX // 3280.0 kHz $*

9152.2		UNID station (996)	SITOR-A: 0930 wx for Davao, PHL; msg; Provincial Disaster Co-Ordination Committee (PDCC) Conference mentioned
9154.0	D4B	Amilcar C. Air, Sal, CPV	ITA2 50 Bd: 1656-0751 ry
		UNID teleprinter	CIS 10-11-11 MFSK
9156.0		UNID teleprinter	MFSK
9160.0	AJE	USAF Croughton, G	SSB
		UNID teleprinter	100
9168.0	HBD 20	MFA Berne, SUI	SITOR-A: 0632-1606 tfc + msgs + msgs (5lgs) to HBD 54 Rome
	HBD 40	Swiss E Belgrade, SRB	SITOR-A: 1400 tfc to HBD 20 Berne
	HBD 54	Swiss E Rome, I	SITOR-A: 1305 msgs + tfc to HBD 20 Berne, 1606+1730 tfc to HBD 20
9172.0		UNID teleprinter	75
9174.5	HBD 20	MFA Berne, SUI	SITOR-A: 1115-1406 tfc or msg or msg (G press review)
9177.2		UNID teleprinter	250
9178.0	HBD 20	MFA Berne, SUI	SITOR-A: 0929+1235 msg (5lgs), 1700 final tfc, s. off
9178.5	'RETWB'	Guardia Civil Barcelona, E	SITOR-A: 0903 tfc to 'RETXX' Madrid
	'RETXX'	MOI Madrid, E	SITOR-A: 0903 msg to 'RETWB' Barcelona
9182.5		UNID teleprinter	300
9186.0		UNID teleprinter	CIS 10-11-11 MFSK
9192.6	5ST	ASECNA Antananarivo, MDG	ARQ-E3 48 Bd: 0328+0337+1105+1433+2140 tfc or msg or "ch" [TPA]; QSX 9378.5 kHz
9196.6	A9M 41	GNA Manama, BHR	ITA2 75 Bd: 0500-1500 A nx
9198.0		Polish E Brussels, BEL	POL-ARQ 200 Bd: 0920-1407 msg (5lgs) to SNN 299 Warsaw
9204.0		UNID teleprinter	75
9205.0		UNID teleprinter	96
9209.0	'6XM8'	BNDVB Bonn, D	ARQ-E 288 Bd: 0602+1250-1655 encrypted tfc to 'C37A' MOSSAD Tel Aviv
			ITA2 100 Bd: 1300 clg 'C37A' MOSSAD Tel Aviv
9210.0	IDR	IN Rome, I	SSB
9211.0	HBT 29	Berne Air, SUI	SSB
9212.0	'RFFE'	FF Bordeaux, F	ARQ-E 72 Bd: 1500 operational msgs "de souge" to 'RFFEDF'
9215.0	ZLK 47	USN Christchurch, NZL	SSB
9216.7		Egyptian E Jakarta, INS	SITOR-A: 1411 ATU-A tfc to Cairo
		MFA Cairo, EGY	SITOR-A: 1445 clg Muqdisho
9221.7		MFA Cairo, EGY	SITOR-A: 2134+2140+2241 ATU-A msg to Washington
9225.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 0935 msg
9225.5		UNID teleprinter	200
9226.0	'RPFN'	PN Lisbon, POR	ITA2 75 Bd: 0100 ry
9226.7		Egyptian E Ankara, TUR	SITOR-A: 0000+2144 ATU-A msgs to Cairo
9227.0	'D2Z'	French E Budapest, HNG	FEC-A 192 Bd: 1606 msg (5lgs) to 'P6Z' Paris
9230.0		UNID teleprinter	100
9231.0	7XR 20	El Djaza'ir Meteo, ALG	SSB
	7XR 31	Bechar Meteo, ALG	SSB

9231.0	7XR 37	Djanet Meteo, ALG	SSB
	7XR 54	Ghardaia Meteo, ALG	SSB
	7XR 62	In Amenas Meteo, ALG	SSB
	7XR 70	In Salah Meteo, ALG	SSB
	7XR 85	Tamanrasset Meteo, ALG	SSB
	7XR ..	Tebessa Meteo, ALG	SSB
9238.0		UNID teleprinter	100
9240.0	P2A 2	PNGDF Port Moresby, PNG	SSB
9241.7		Egyptian E El Djaza'ir, ALG	SITOR-A: 1708 ATU-A msgs to Cairo, 1757 msgs to Cairo
9250.7	FJY 2	DTRE Port-aux-Francais, KER	ARQ-E3 96 Bd: 0350 + 1010 msgs to FJY 3 Dumont d'Urville
9256.7	HGX 21	MFA Budapest, HNG	DUP-ARQ: 0728 tfc + msg (5lgs) + msg to HGX 26 Bucharest
	HGX 26	Hungarian E Bucharest, ROU	DUP-ARQ: 0728 + 1030 tfc to HGX 21 Budapest
9259.0	'P6Z'	MFA Paris, F	FEC-A 192 Bd: 1420 clg 'D2Z' Budapest
	'RFGW'	MFA Paris, F	FEC-A 192 Bd: 0940 tfc + msg (5lgs) after "BBBB" to various embassies
9260.0		UNID teleprinter	100
9262.5		UNID teleprinter	MFSK 12
9264.0		UNID teleprinter	CIS 10-11-11 MFSK
9266.0	OMS	MFA Bratislava, SVK	ITA2 100 Bd: 0910-1023 msgs or msg (Slovak nx)
9269.7	FJY 3	DTRE Dumont d'Urville, ATA	ARQ-E3 96 Bd: 0410 msgs to FJY 2 Port-aux-Francais
9270.0	AFA	USAF Andrews, MD, USA	SSB
9270.3		UNID station (896)	CIS-14 100 Bd: A/B: 1052 R tfc wca
9275.0		MFA Oslo, NOR	TWINPLEX YYBB BYBY: SITOR-A: 1048 tfc, s. off
9278.0	DMK	MFA Bonn, D	ALIS: 1120 encrypted msgs, 1140 encrypted msgs after "VVV..." to Amman
	OLZ	MFA Prague, CZE	ITA2 100 Bd: 0705-1040 + 1918 ry or tfc + msgs + msgs (5fgs) CW
9280.7		Japanese E Rabat, MRC	SITOR-A: 1000 msg (E press review) + msgs (5lgs) to Tokyo
9291.0		Polish E Helsinki, FIN	POL-ARQ 100 Bd: 1008 msg to SNN 299 Warsaw, 1140 msg (5fgs) to SNN 299, 1209 msg to SNN 299
9294.0		Italian E Belgrade, SRB	ALIS: 1317 msg (5lgs) + final tfc to Rome, s. off
9296.0		MFA Rome, I	ALIS: 1105 msg (5lgs)
9297.0		Polish E Beijing, CHN	POL-ARQ 100 Bd: 1350 msg to SNN 299 Warsaw, s. off; 1604 operational tfc to SNN 299
9298.5	VTP	IN Vishakhapatnam, IND	ITA2 50 Bd: 1600 ry
9300.0		UNID teleprinter	75
9311.0		ARCO Bontang, INS	SITOR-A: 1119 msg (daily situation report) to Samarinda
		PERTAMINA Samarinda, INS	SITOR-A: 1119 operational tfc to Bontang
9318.0	*NRK*	*USN Keflavik, ISL*	*FAX // 3357.0 kHz* $
9320.0	AFA	USAF Andrews, MD, USA	SSB

9320.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 1441 msgs to various embassies
9325.0		UNID teleprinter	100
9331.7		Egyptian E El Djaza'ir, ALG	SITOR-A: 1746 msgs (5lgs) + ATU-A msgs to Cairo, 2151 + 2255 ATU-A msg to Cairo
9332.0		UNID teleprinter	81
9337.5	MKK	RAF London, G	Piccolo 6: 0935 operational msg to MTS VFT: ITA2 50 Bd: 0755 + 1544 ryi
9340.0	*RCH 72*	*Tashkent Meteo, UZB*	*FAX // 3690.0 kHz $*
9341.5	FDY	FAF Orleans, F	ITA2 50 Bd: 1613 ry
9352.3		Algerian E Hanoi, VTN	Coquelet 8: 2200 msg to 7RQ 20 El Djaza'ir
9355.0	*RNR 4*	*Magadan Meteo, FE, RUS*	*FAX 60/576: 1042 chart*
9355.5		UNID teleprinter	81
9360.0	*OXT*	*Copenhagen Meteo, DNK*	*FAX // 5850.0 kHz $* CW
9361.9	DGJ 36L1	PIAB Bonn, D	FEC-A 96 Bd: 1600-1800 G nx
9362.0		Polish E Sofia, BUL	POL-ARQ 100 Bd: 0745 msg (Polish nx)
9363.5	'RFFE'	FF Bordeaux, F	ARQ-E 72 Bd: 2050 "controle de voie" "de souge"
	'RFFXQA'	FF Sarajevo, BIH	ARQ-E 184 Bd: 1005 "controle de voie" [UAQ]
9368.0	'RFFBBYZ'	FF Zagreb, HRV	ARQ-E 184 Bd: 1854 msg to 'RFFXQA' Sarajevo [UAQ]
9373.0	RMP	CISN Kaliningrad, RUS	CW
9378.5	3BZ	Plaisance Air, MAU	ARQ-E3 48 Bd: 0338-1438 tfc or "ch" [PTA]; QSX 9192.6 kHz
9380.0	'P6Z'	MFA Paris, F	FEC-A 192 Bd: 0746 tfc to 'U3H' Moscow, 0949 tfc to 'W3S', ry, 1125 msg
	'RFGW'	MFA Paris, F	FEC-A 192 Bd: 0950 msgs to 'F9S' Prague
9386.0		UNID teleprinter	50
9394.7		UNID FF station (896)	ARQ-E3 200 Bd: 1055-1212 tfc
9395.0	HMF 84	KCNA Pyongyang, KRE	ITA2 50 Bd: 1500-1700 E nx, 1800-2100 + 2130-2400 F nx
9396.0	NPM	USN Pearl Harbour, HWA	COMB
9399.0	OEC	MFA Vienna, AUT	SI-ARQ 96 Bd: 6 characters: 1256 + 1355 msg (5lgs)

9400.0 - 9500.0 BROADCASTING FIXED <SSB only, as from 01 April 2007>

9405.0		UNID teleprinter	75
9430.0	*3MA 34*	*CNA T'ai-pei, TAI*	*FAX 60/288 or 120/576 LSB ISD: 0201-1507 C nx (text)* CW
9435.0	GXQ	BA London, G	VFT: ITA2 50 Bd: 0834-2147 ryi
9438.0	*JMJ 3*	*Tokyo Meteo, J*	*FAX // 3365.0 kHz $*
9459.0	*ZKLF*	*Auckland Meteo, NZL*	*FAX // 5807.0 kHz $*
9462.5	ETD 3	Addis Ababa Air, ETH	ITA2 50 Bd: 0242 + 0339 msgs, 2147 + 2243 ry
9485.0	GYA	RN London, G	VFT: ITA2 75 Bd: 1103 ry

9500.0 - 9900.0 BROADCASTING <530>

9797.0	YOJ 27	ROMPRES Bucharest, ROU	ITA2 50 Bd: 0900 E nx, 1000 F nx
9797.5	'C37A'	MOSSAD Tel Aviv, ISR	ARQ-E 288 Bd: 1416 encrypted tfc to '6XM8' BNDVB Bonn
9872.0		UNID teleprinter	ITA2 100 encrypted

9900.0 - 9995.0 FIXED

9907.0	NGD	USN McMurdo Sound, ATA	SSB
9907.7	'RFFP'	MOD Paris, F	ARQ-M2 200 Bd: A: 0834 tfc, 1039 AFTN msgs, 1111 tfc, 1805 AFTN msgs, 1839+2014 tfc B: 0720 msg, 0834+1111+1839+2014 tfc
9914.0		Polish E Cologne, D	POL-ARQ 100 Bd: 0802 tfc to SNN 299 Warsaw, 1300 msgs + tfc to SNN 299
9927.5	*RXA 76*	*Almaty Meteo, KAZ*	*FAX 90/576: 0415 chart*
9944.0		KODECO KE5 Platform, INS	SITOR-A: 0030+1938 msgs (situation reports)
9946.0	7CB	IN Belawan, INS	CW
9950.0	ZLBC	GPO Campbell Island, NZL	SSB
	ZME	GPO Raoul I., Krm. Is., NZL	SSB
9970.0	FDC	FAF Metz, F	CW
	JMH 3	*Tokyo Meteo, J*	*FAX // 3622.5 kHz $*
9982.5	*KVM 70*	*Honolulu Meteo, HWA*	*FAX $*
9983.7	'RFFA'	MOD Paris, F	ARQ-E3 100 Bd: 1653-0437 tfc or msg (5lgs) [IRE]
9987.2		Romanian E Warsaw, POL	RUM-FEC 218 Bd: 1306 msgs to Bucharest
9994.0	CSY	Santa Maria Air, AZR	ITA2 50 Bd: 24 h ry or msgs [MCA]

9995.0 - 10003.0 STANDARD FREQUENCY AND TIME SIGNAL <501>

9996.0	RWM	Moscow TS, RUS	CW
10000.0	ATA	Delhi TS, IND	SSB
	BPM	Xi'an TS, CHN	CW/SSB
	JJY	Tokyo TS, J	COMB
	LOL 2	AN Buenos Aires TS, ARG	CW/SSB
	RCH	Tashkent TS, UZB	CW
	RTA	Novosibirsk TS, SW, RUS	CW
	WWV	Fort Collins TS, CO, USA	COMB
	WWVH	Kihei TS, Maui Island, HWA	COMB

10003.0 - 10005.0 STANDARD FREQUENCY AND TIME SIGNAL + Space Research <501>

10003.0	WORLDWIDE	MSV SAR OPERATIONS FREQ.	SSB
10004.0	RID	Irkutsk TS, SE, RUS	CW

10005.0 - 10100.0 AERONAUTICAL MOBILE (R) <501>

10006.0		AMS = 6A 10 13G	SSB
10009.0		AMS = 2B 2C 7B 9B 13K	SSB
10012.0		AMS = 5 10 13J	SSB
10015.0		AMS = 2 6C 12D	SSB
10016.7		**Egyptian E Amman, JOR**	**SITOR-A: 1707 ATU-A msgs to Cairo**
10018.0		AMS = MID, 6G 9 13J 13K	SSB
10021.0		AMS = 1 6B 12C 13G	SSB
10024.0		AMS = SAM, 2B 2C 3B 9B	SSB
10027.0		AMS = W I/II	SSB
10030.0		AMS = W I/IV	SSB
10031.7	**KNY 29**	**Egyptian E Washington, DC, USA**	**SITOR-A: 0008 + 1347 + 1910 + 2042 ATU-A msg + tfc to Cairo**
10033.0		AMS = W II/V	SSB
10036.0		AMS = 1E 6E 13G 13H	SSB
10039.0		AMS = 3B 3C 4A 9B 12C	SSB
10042.0		AMS = EA, 9C 10F 13C 13J 13K	SSB
10045.0		AMS = 2 3A 11B 13H 14	SSB
10046.0	4XZ	IN Haifa, ISR	CW
10048.0		AMS = NP, 2A 5D 13A 13B	SSB
10051.0		AMS = 6A 6E 13I, VNAT	SSB
10054.0		AMS = 2A 2C 6G 12	SSB
10057.0		AMS = CEP, 3A, VAFI	SSB
10060.0		AMS = 1D 6F 13K	SSB
10063.0		AMS = 4B 6G 12E	SSB
10066.0		AMS = SEA, 1B 10A 13M	SSB
10069.0		AMS = W I/IV	SSB
10072.0		AMS = W I/III	SSB
10075.0		AMS = W II/V	SSB
10078.0		AMS = W I/III	SSB
10081.0		AMS = CWP,	SSB
		4A 6A 7C 13F	SSB
10084.0		AMS = EUR SP, 6E 13D	SSB
10087.0		AMS = 3 14, VSAM	SSB
10090.0		AMS = 12E 12F, VNCA	SSB
10093.0		AMS = 5B 6B 11B 13N	SSB
10095.0		**UNID African UNO station (296)**	**PACTOR: 1700 situation report fm SDN, 1745 abrupt s. off**
10096.0		AMS = NCA SAM, 7D	SSB

10100.0 - 10150.0 FIXED + Amateur <510>

10100.0	3BT	Vacoas Meteo, MAU	SSB
		Agalega Is. Meteo, MAU	SSB
		Al Fatah Damascus, SYR	SSB
		Port Mathurin Meteo, ROD	SSB
		Saint Brandon Meteo, MAU	SSB
10106.0		UNID teleprinter	75
10112.0	**FJY 2**	**DTRE Port-aux-Francais, KER**	**ARQ-E3 96 Bd: 0808 + 0850 + 1123 to FJY 3 Dumont d'Urville**
		UNID teleprinter	**75**
10113.0		**Polish E London, G**	**POL-ARQ 100 Bd: 1045 + 1132 msgs to SNN 299 Warsaw**
10114.0	**SNG 205**	**Warsaw, POL**	**ITA2 75 Bd: 1016 ry**
10117.0	*BAF 4*	*Beijing Meteo, CHN*	*FAX // 5527.0 kHz $*

10123.0	*SUU*	*Cairo Meteo, EGY*	*FAX // 4526.5 kHz $*
10127.0	7RQ 20	MFA El Djaza'ir, ALG	Coquelet 8: 0750+0858+1442 msgs to 7RP 20 Paris, 1557 msgs to various embassies
10130.0	RBX 73	Tashkent Meteo, UZB	ITA2 50 Bd: 0310-1230 wx
10132.0	TNL	ASECNA Brazzaville, COG	ITA2 50 Bd: 0615+1746-2204 ry or msg [FSA]
10135.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 0913 tfc, 0946 msgs to various embassies
10140.0		UNID station (196)	CIS-14 96 Bd: A/B: 0527+0721+0730 R tfc wca

10150.0 - 11175.0 FIXED + Mobile except aeronautical mobile (R)

10151.9	4UZ	UNO Geneva, SUI	PACTOR: 1130 msg
10154.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 0630 tfc
10156.7		Egyptian E Baghdad, IRQ	SITOR-A: 1710 ATU-A msgs to Cairo
10158.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 0918-1054+1453+1535 msg or msg (Bulgarian nx)
10161.5		AHE Belgrade, SRB	PACTOR: 1110 tfc + msg
		AHE Lyon, F	PACTOR: 1003 "faire un phone patche avec BI ok, passe en phonie", s. off, into very weak ↓; 1509 msg
			SSB
10162.5	YIL 71	INA Baghdad, IRQ	ITA2 50 Bd: 1000-1400 E nx, 1500 A nx
10165.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 2140 msg (Bulgarian nx)
10165.9	SAM	MFA Stockholm, S	SWED-ARQ: 1602 msg (5lgs)
10167.0		UNID teleprinter	CIS 10-11-11 MFSK
10169.0	HSW 63	Bangkok Meteo, THA	ITA2 50 Bd: 24 h wx
		UNID teleprinter	200
10172.7		Egyptian E Khartoum, SDN	SITOR-A: 1651 clg Cairo, 1656 msgs (5lgs) + ATU-A tfc to Cairo
		Egyptian E Nairobi, KEN	SITOR-A: 1703 ATU-A msgs to Cairo
10174.0	'DOR'	MFA Sofia, BUL	ITA2 160 Bd: 1108 msg (5fgs)
			ITA2 180 Bd: 1352 msgs
10175.0		UNO Basikounou, MTN	SITOR-A: 1743 msg, s. off
		UNO Nouakchott, MTN	SITOR-A: 0800+0815+2032 msgs
10177.3	CXR	UN Montevideo, URG	ITA2 75 Bd: 2205 msgs to CCS Santiago / CPF 2 La Paz / HDN Quito / ZPK Asuncion
10177.7	'RFFA'	MOD Paris, F	ARQ-E3 192 Bd: 0552-1226 "controle de cle" or msgs to 'RFLI' Fort de France, 1933+2127 tfc to 'RFLI' [LFB, LSB]
10180.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1610 msg, 1725 encrypted msg + msg
10180.3		UNID station (496)	IRA-ARQ 300 Bd: 0612 tfc "gd om zoh zoh 1"
10186.0		UNID teleprinter	100
10191.0		MFA Rome, I	ARQ-E 96 Bd: 1020 msg (5lgs)
10192.5	DHJ 59	GN Wilhelmshaven, D	SSB
10200.0	MKK	RAF London, G	VFT: ITA2 50 Bd: 24 h ryi

10212.0		UNID British military station (596)	VFT: ARQ-M2 96 Bd: A: 0905+1105+1640 encrypted tfc, 2022 wx B: 1105 encrypted tfc VFT: ITA2 75 Bd: 0905+1105+1834 encrypted tfc
10213.1	CNM 29	MAP Rabat, MRC	ITA2 50 Bd: 1000-1130 F nx, 1200-1400 E nx, 1530-1700 F nx
10215.0	HZN 48	Jeddah Meteo, ARS	ITA2 100 Bd: 24 h ry or wx
10216.0	'RFFXQA'	FF Sarajevo, BIH	ARQ-E 184 Bd: 0522-0915+1822 tfc or msg (5lgs) [UAQ]
10219.2		BGS Mostar, BIH	VFT: ARQ-E 72 Bd: 0927 tfc "ist alles unklar, da auf blutrot" to Bonn, 0941 "ich glaube, die verbindung ist noch schlechter, am besten noch einmal", encrypted msg after "EEEE..." to Bonn
10233.0	'RQFNC'	BA Brussels, BEL	SSB
10233.3	'LEONE'	IA IFOR Rome, I	SSB
10235.0	RWG 57	R Moscow feeder, RUS	SSB
10242.0		Bulgarian E Tripoli, LBY	ITA2 75 Bd: 0632 msgs to 'DOR' Sofia
		Bulgarian E Vienna, AUT	ITA2 75 Bd: 0811+1332 encrypted msgs to 'DOR' Sofia
10246.1		UNID teleprinter	150
10248.0	'KIT'	Bulgarian E Kiyev, UKR	ITA2 75 Bd: 1141 tfc to 'DOR' Sofia
10250.0		*Madrid Meteo, E*	*FAX // 6918.5 kHz $*
10253.0	*NPN*	*USN Apra Harbour, GUM*	*FAX // 5258.0 kHz $*
10256.6		UNID teleprinter	100
10257.0	*NPN*	*USN Apra Harbour, GUM*	*FAX // 5262.0 kHz $*
10259.5	NNN 0MDF	USN MARS Mayp., FL, USA	PACTOR: 1550 msg
10264.1		UNID teleprinter	100
10272.0		UNID station (996)	ALIS-2 241 Bd: 1130+1349+2050 tfc
10272.5	GYU	RN Gibraltar, GIB	Piccolo 6: 0830 tfc, s. off
10275.0	RYM	IAG Moscow, RUS	SSB
10280.0	MKK	RAF London, G	VFT: ITA2 50 Bd: 24 h ryi
10281.0		Polish E Brussels, BEL	POL-ARQ 200 Bd: 1345 msgs + final tfc to SNN 299 Warsaw, s. off; 1415 s. on with tfc + msg to SNN 299
10281.2	'RFLIG'	FF Cayenne, GUF	ARQ-E 96 Bd: 1931-0837 "controle de voie" or msg [RTI]
10283.0	HB8 GVA	ICRC Geneva, SUI	PACTOR: 1216 tfc to 'RC2SAR' Sarajevo, 1400 msgs to 'RC2ZAG' Zagreb, 1559 tfc to 'RC2ZAG', 1729 msg to 'RC2BEL' Belgrade
	'RC2BEL'	ICRC Belgrade, SRB	PACTOR: 1148 s. on with msg to 'RC2ZAG' Zagreb, 1729 tfc to HB8GVA Geneva, 1735 msgs
	'RC2SAR'	ICRC Sarajevo, BIH	PACTOR: 1216 msg to HB8 GVA Geneva
	'RC2ZAG'	ICRC Zagreb, HRV	PACTOR: 1018 msg, 1148 tfc to 'RC2BEL' Belgrade, 1400+1559 msgs to HB8 GVA Geneva
10291.0	GKX	Portishead Air, G	SSB

10297.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 1027 msg + tfc
10299.0	HSW 62	Bangkok Meteo, THA	ITA2 50 Bd: 24 h wx
10307.7		Egyptian E London, G	SITOR-A: 1510 ATU-A msg to Cairo
10308.5	FDY	FAF Orleans, F	ITA2 50 Bd: 0909-1832 ry
10310.6		UNID teleprinter	100
10314.0	SNN 299	MFA Warsaw, POL	ITA2 75 Bd: 1555+1647+1658 ry POL-ARQ 100 Bd: 0728-1636 tfc or msgs or msgs (5fgs) CW
10317.5	MKD	RAF Akrotiri, CYP	Piccolo 6: 1945+2115 operational tfc
10320.0	BAA 8	Beijing Meteo, CHN	ITA2 50 Bd: 2340-1022 ry or wx
		Bulgarian E Paris, F	ITA2 75 Bd: 1300 encrypted msg to 'DOR' Sofia
10340.0	'KARIM'	MOI El Djaza'ir, ALG	ITA2 50 Bd: 0900 msg + ATU-A msgs + tfc to various Prefectures
10340.5		UNID teleprinter	110
10344.0		R Moscow feeder, RUS	SSB
10346.0	GYU	RN Gibraltar, GIB	VFT: ARQ-M2 96 Bd: A: 24 h encrypted tfc VFT: ITA2 75 Bd: 0800+2017 encrypted tfc
10348.0	GXQ	BA London, G	ITA2 50 Bd: 0910 ryi
	'C37A'	MOSSAD Tel Aviv, ISR	ARQ-E 192 Bd: 0538+1029+1534+1900 encrypted tfc to '6XM8' BNDVB Bonn
10350.0		UNID teleprinter	200
10356.0		UNID teleprinter	81
10358.0		UNID teleprinter	81
10364.0	'RFTJDA'	FF Libreville, GAB	ARQ-E3 48 Bd: 1542-0625 "controle de voie" + msgs [JDF]
10367.0	'RPTMB'	PN Porto Santo, MDR	ITA2 75 Bd: 1050 foxes; 1200 foxes, clg 'RPFN' Lisbon
10375.0		UNID station (896)	CIS-14 96 Bd: A/B: 1012 R tfc wca
10384.6	5YE	Nairobi Meteo, KEN	ITA2 50 Bd: 1507+2200 wx
10387.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 0830 msg + msg (5fgs)
		Polish E Moscow, RUS	POL-ARQ 100 Bd: 0914 msgs (5fgs) to SNN 299 Warsaw
10388.0		Polish E Rome, I	POL-ARQ 100 Bd: 0912+1010 tfc to SNN 299 Warsaw, 1349+1410 msgs + msg (5fgs) to SNN 299
		UNID teleprinter	81
10391.7		Egyptian E Tripoli, LBY	SITOR-A: 1526 ATU-A msg to Cairo, 1541 tfc to Cairo
10393.7	'RFFA'	MOD Paris, F	ARQ-E3 200 Bd: 0020+0626+0830+1545 tfc or msgs to 'RFFVAT' Incirlik [FDX, PVX]
10400.2	'RFQP'	FF Jibuti, DJI	ARQ-M2 200 Bd: A: 0524 tfc, 1954 msg (5lgs) after "BBBB", 2108+2340 tfc [RQG] B: 1848-0524 "controle de voie" or tfc [RQF]
10407.0	6VU	ASECNA Dakar, SEN	ITA2 50 Bd: 0327+0855+1645+1734+2036 ry

10408.6	LN2 A	Beacon Sveio, NOR	CW
10411.7		Egyptian E Paris, F	SITOR-A: 1558-1952 ATU-A msg to Cairo
10412.0	'RFFXL'	FF Naqoura, LBN	ARQ-E 72 Bd: 1525-0633 msg to 'RFFX' Paris [XZL]
10415.0	JJD	RRL Tokyo, J	CW
		UNID teleprinter	81
10418.7		Egyptian E Moscow, RUS	SITOR-A: 1530 ATU-A msg + tfc to Cairo
10422.5	OEC	MFA Vienna, AUT	SI-ARQ 96 Bd: 5 or 6 characters: 0708-1438 tfc or msg (5lgs) to Ankara or Damascus
	OEC ..	Austrian E Ankara, TUR	SI-ARQ 96 Bd: 5 characters: 0925 msg (5lgs) to OEC Vienna, 1438 msg to OEC
	OEC ..	Austrian E Damascus, SYR	SI-ARQ 96 Bd: 6 characters: 0840 msg to OEC Vienna
10423.0	YMA 20	Ankara Meteo, TUR	ITA2 50 Bd: 24 h ry or wx
10425.0	'P6Z'	MFA Paris, F	ARQ6-90 200 Bd: 1600 msgs to Niamey
10431.2		UNID teleprinter	150
10432.0	FXD	Dzaoudzi Meteo, MYT	SSB
	FXE	Europa Island Meteo, REU	SSB
	FXJ	Juan de Nova Meteo, REU	SSB
	FXR	Saint Denis Meteo, REU	SSB
	FXT	Tromelin I. Meteo, REU	SSB
	FXZ	Glorieuses Is. Meteo, REU	SSB
10433.0	TAD	MFA Ankara, TUR	FEC-A 144 Bd: 0746 msg (5lgs), 1012 tfc
		Turkish E Athens, GRC	FEC-A 144 Bd: 1452 msgs to TAD Ankara
		Turkish E Brussels, BEL	FEC-A 144 Bd: 0928 msg (Turkish press review) to TAD Ankara
		Turkish E Helsinki, FNL	FEC-A 144 Bd: 0906 msgs to TAD Ankara
		Turkish E Sarajevo, BIH	FEC-A 144 Bd: 1516 msg to TAD Ankara
		Turkish E Sofia, BUL	FEC-A 144 Bd: 0730 msg (E press review) to TAD Ankara
		Turkish E Stockholm, S	FEC-A 144 Bd: 0843 msg to TAD Ankara
		Turkish E Washington, DC, USA	FEC-A 144 Bd: 1042 msg to TAD Ankara
		Turkish E Zagreb, HRV	FEC-A 144 Bd: 0930 msg (Turkish press review) to TAD Ankara
10434.0	'TBDJ'	UNID station (196)	ITA2 75 Bd: 1540 ry
10435.0		Romanian E Moscow, RUS	RUM-FEC 218 Bd: 1502 msg to Bucharest
		many Customs stat., AUS	SSB
10435.5	'RETAQE'	SA Vitoria, E	SITOR-A: 2154 tfc + msg
10436.0		Turkish E Ottawa, ONT, CAN	FEC-A 144 Bd: 0910 msgs to TAD Ankara
10442.0		UNID station (796)	ITA2 100 Bd: 0100+0755+1128 ry, encrypted tfc
10444.0		Puerto Princesa, PHL	SSB
10445.0		Gorontalo, INS	SSB
		Palembang, INS	SSB
		Sonder, INS	SSB
10446.5	GYU	RN Gibraltar, GIB	Piccolo 6: 1248 ry
10449.0		UNID teleprinter	CIS 10-11-11 MFSK

10451.7		Ambon, INS	SSB
		Kendari, INS	SSB
10452.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 0939 msgs to Tripoli
10453.0		Romanian E Stockholm, S	RUM-FEC 218 Bd: 0900 msg to Bucharest
10454.0		VoA Greenvl. fdr., NC, USA	ISB
10458.0		UNID teleprinter	CIS 10-11-11 MFSK
10461.7		Egyptian E Moscow, RUS	SITOR-A: 1528 tfc to Cairo
10463.0		Romanian E Stockholm, S	RUM-FEC 218 Bd: 1447 msg to Bucharest
10464.7		Ouargla Prefecture, ALG	Coquelet 8: 1236 tfc +. msg to El Djaza'ir
10467.7	'RFPTC'	FF N'djamena, TCD	ARQ-M2 200 Bd: A: 0258+0628+0858+1135+2236+2345 msg + tfc to 'RFFA' Paris B: 2000 msg (5lgs) after "BBBB"
10470.0	BLM 23	Chengdu Meteo, CHN	ITA2 50 Bd: 0014-0942+1912 wx
	GYU	RN Gibraltar, GIB	ITA2 75 Bd: 1013+1953 ry
10470.5	FDC	FAF Metz, F	CW
10474.0		UNID teleprinter	CIS 10-11-11 MFSK
10477.0		MFA Bucharest, ROU	RUM-FEC 218 Bd: 1916 msgs
10480.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 1053 msg (5fgs) + msg msg (Bulgarian nx)
	'RFFXQA'	FF Sarajevo, BIH	ARQ-E 72 Bd: 0843-1554 "controle de voie" or msgs or msg (5lgs) after "BBBB" to 'RFFX' Paris [UQA]
10482.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 1000 msgs (5lgs)
10484.0	'DOR'	MFA Sofia, BUL	ITA2 150 Bd: 0822-1048 schedule or encrypted msg after "DDD..." or msg (Bulgarian or E nx)
10485.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1015 msg (Romanian nx), s. off; 1403 msg
10490.0	RDL	Smolensk, RUS	CW
10492.0		UNID teleprinter	81
10493.0	WGY 9..	many FEMA stations, USA	SSB
		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1014-1310 msg or encrypted msg or msg (Romanian nx)
			CW
10493.7	'RFTJF'	FF Port Bouet, CTI	ARQ-E3 48 Bd: 1430-0856 "controle de voie" or msg to 'RFTJ' Dakar [JFJ]
10495.0	MKD	RAF Akrotiri, CYP	VFT: ITA2 75 Bd: 1634 ryi
10505.3		EKDMC Mbuji-Mayi, ZAI	SITOR-A: 1036 msgs + tfc to Lobito
		ENDIAMA Lobito, AGL	SITOR-A: 1036 tfc to Mbuji-Mayi
10512.0	AQP	PN Karachi, PAK	CW
		UNID teleprinter	100
10516.0	LOL	AN Buenos Aires, ARG	ITA2 75 Bd: 2200+2345 msgs to PWX Brasilia
10521.7	'RFLI'	FF Fort de France, MRT	ARQ-E3 192 Bd: 1432+2331-0714 "controle de voie" or tfc to 'RFTJ' Dakar [LIJ]
10524.0	HMF 45	KCNA Pyongyang, KRE	ITA2 50 Bd: 1145-1430 F nx
10530.0		UNID station (796)	CIS-14 200 Bd: A/B: 0544 R tfc wca

10536.0	CFH	CF Halifax, NS, CAN	ITA2 75 Bd: 24 h ry or wx
			FAX // 122.5 kHz $
10539.6	CSY	Santa Maria Air, AZR	ITA2 50 Bd: 24 h ry or msg
10542.0	*AOK*	*USN Rota, E*	*FAX // 7595.0 kHz $*
10542.5		UNID teleprinter	150
10551.3	GFL 23	Bracknell Meteo, G	ITA2 75 Bd: 24 h wx
10554.0	DMK	MFA Bonn, D	ALIS: 0520 tfc, 1455 encrypted msgs
10555.0	*AXI 34*	*Darwin Meteo, NT, AUS*	*FAX // 2628.0 kHz $*
10557.5		MFA Rome, I	SITOR-A: 1042 msgs (5lgs) to East European embassies
10575.0	SKJ 25	Stockholm Air, S	SSB
10576.5		UNID teleprinter	75
10580.0	HMF 46	KCNA Pyongyang, KRE	ITA2 50 Bd: 0400-0600+1000-1100+1230-1430+1500-1700 E nx
10582.9	SAM	MFA Stockholm, S	SWED-ARQ: 0800-1512 tfc or msg or msg (Swedish press review)
	SAM 40	Swedish E Warsaw, POL	SWED-ARQ: 0927 msgs to SAM Stockholm
10589.0	AFA	USAF Andrews, MD, USA	SSB
10590.0	WGY 9..	many FEMA stations, USA	SSB
		MFA Pyongyang, KRE	ITA2 50 Bd: 1915 msgs
		UNID teleprinter	200
10595.0		UNID teleprinter	100
10600.0	XVN 37	VNA Hanoi, VTN	ITA2 50 Bd: 1200-1330 F nx, 1330-1530 E nx, 1530+1600 F nx
10612.0		Czech E Belgrade, SRB	IRA-ARQ 200 Bd: 1010 encrypted msg to OLZ Prague
		Czech E Bucharest, ROU	ITA2 100 Bd: 1039 msg + tfc to OLZ Prague, s. off
10615.5	GYU	RN Gibraltar, GIB	Piccolo 6: 2038+2102 operational tfc
10625.0		DOSC Moscow, RUS	CIS 10-11-11 MFSK: 1501 msg (5lgs)
10638.7	'RFQP'	FF Jibuti, DJI	ARQ-M2 200 Bd: A: 1723-0526 "controle de voie" [QRG]
10639.0	NGD	USN McMurdo Sound, ATA	SSB
	NPX	USN South Pole Stn., ATA	SSB
10650.0	BJZ 23	Wuhan Meteo, CHN	ITA2 75 Bd: 2355-1006 wx
	'KARIM'	MOI El Djaza'ir, ALG	ITA2 50 Bd: 1335 msgs
10653.0		Polish E Paris, F	POL-ARQ 100 Bd: 1151 tfc + msgs to SNN 299 Warsaw
10654.0	MKK	RAF London, G	VFT: ITA2 50 Bd: 24 h ryi
10676.5		AIOC Azeri Oilfield, AZE	SITOR-A: 0502 msg to Baku
		AIOC Baku, AZE	SITOR-A: 0437 msgs + tfc to Günazli Oilfield, 0502 tfc to Azeri Oilfield
		AIOC Günazli Oilfield, AZE	SITOR-A: 0437 tfc to Baku
10686.0	9DM 17	Tehran Meteo, IRN	ITA2 50 Bd: 1420-0751 wx
10698.0		UNID teleprinter	75
10702.5	7RQ 20	MFA El Djaza'ir, ALG	Coquelet 8: 0844 msgs to 7RP 20 Paris, 1200 tfc to 7RP 20
10704.0	SRZ 944	French E Warsaw, POL	FEC-A 192 Bd: 1010 msg (5lgs) after "BBBB" to 'RFGW' Paris
10711.0	SRZ 944	French E Warsaw, POL	FEC-A 192 Bd: 0919 (5lgs) after "BBBB" to 'RFGW' Paris, 1503+1519 msg to 'RFGW'

10718.0	SRZ 944	French E Warsaw, POL	FEC-A 192 Bd: 1030 + 1553 msgs (5lgs) to 'RFGW' Paris
10720.0	*LRB 72*	*Buenos Aires Meteo, ARG*	*FAX $*
10726.5	'P6Z'	MFA Paris, F	FEC-A 192 Bd: 0836-1722 tfc or msg or msg (5lgs) after "BBBB" to 'A9C' Bucharest or 'G8T' Belgrade [REX] FEC-A 384 Bd: 0845 msg
10729.0	OLZ	MFA Prague, CZE	ITA2 100 Bd: 1037 msg
10742.0		UNID teleprinter	300
10749.5	'C37A'	MOSSAD Tel Aviv, ISR	ARQ-E 288 Bd: 1442-2040 encrypted tfc to '6XM8' BNDVB Bonn
10750.0	'U3H'	French E Moscow, RUS	FEC-A 192 Bd: 0728 msg (5lgs) to 'P6Z' Paris
10753.4		UNID teleprinter	100
10765.0	OVC	DM Groennedal, GRL	CW
10780.0	AFE 70	USAF Cape Can., FL, USA	SSB
	AFE 83	USAF Wideawake, ASC	SSB
	AFE 86	USAF Cedar Grove, ATG	SSB
10798.3	'RFLI'	FF Fort de France, MRT	ARQ-E3 96 Bd: 24 h "controle de voie" or msgs or msg (5lgs) or msg (F press review) or wx [IRT]
10800.0	MKD	RAF Akrotiri, CYP	Piccolo 6: 2302 operational tfc
10802.0	TAD	MFA Ankara, TUR	FEC-A 144 Bd: 1110 encrypted tfc to various embassies
10805.0	SGJ 28	Stockholm Air, S	SSB
10814.2	'RFQP'	FF Jibuti, DJI	ARQ-M2 200 Bd: A: 24 h msgs or encrypted tfc after "KKKK..." or "controle de voie" or svc msg to 'RFFA' Paris [QPA, QPB] B: 24 h msgs or air msgs or encrypted tfc after "KKKK..." or "controle de voie" to 'RFFA' [QPA, QPB]
10815.0	VHC	RAN Canberra, ACT, AUS	COMB
10815.5	AAA 3USA	USAF MARS Fort Meade, MD, USA	Packet Radio: 1400 tfc + msgs to AAA 6USA Fort Sam Houston
	AAA 6USA	USAF MARS Fort Sam Houston, TX, USA	Packet Radio: 1400 tfc to AAA 3USA Fort Meade
10816.0		UNID teleprinter	CIS 10-11-11 MFSK
10850.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 1510 msg to Tripoli
10853.0	GYU	RN Gibraltar, GIB	Piccolo 6: 1008 tfc
10855.0	GXQ	BA London, G	VFT: ARQ-M2 96 Bd: A: 1520 encrypted tfc B: 1520 encrypted tfc VFT: ITA2 50 Bd: 0737 + 0908 + 1000 + 1804 ryi
10858.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 0850 msgs (Romanian nx)
10865.0	*NAM*	*USN Norfolk, VA, USA*	*FAX // 3357.0 kHz $*
10865.5	VHC	RAN Canberra, ACT, AUS	Piccolo 6: 0115 + 1509 + 1527 + 1600 operational tfc to GFH Kai Tak
10869.2	'RFVI'	FF Le Port, REU	ARQ-E3 100 Bd: 0314 + 1113 "controle de voie" to 'RFFA' Paris, 1909 tfc to 'RFFA', 2329 "controle de voie" to 'RFFA' [RUN]

10871.7	'D'	Beacon Odessa, UKR	CW
10871.9	'S'	Beacon Arkhangelsk, RUS	CW
10872.0	'C'	Beacon Moscow, RUS	CW
10873.7	'RFVI'	FF Le Port, REU	ARQ-E3 100 Bd: 1643-0520 "controle de voie" or msgs or msgs (5lgs) to 'RFFA' Paris [REI]
10886.0		Italian E Tripoli, LBY	ARQ-N 96 Bd: 0735+1414 msgs to Rome
10890.0	GXQ	BA London, G	VFT: ITA2 50 Bd: 24 h ryi
10891.7		Pakistan E Delhi, IND	SITOR-A: 1250 msgs to Islamabad
10904.0	GXQ	BA London, G	Piccolo 6: 1630 operational tfc
10917.7	'RFTJ'	FF Dakar, SEN	ARQ-E3 48 Bd: 1603-0500 tfc or "controle de voie" or msg or msg (F nx) to 'RFTJF' Port Bouet [TJF]
10927.0		UNID teleprinter	ITA2 75 encrypted
10932.0		UNID teleprinter	81
10937.8		UNID teleprinter	81
10945.0	CFH	CF Halifax, NS, CAN	ITA2 75 Bd: 1456-0140 clg NAWS
10950.2	'RFFA'	MOD Paris, F	ARQ-M2 200 Bd: A: 24 h msgs to 'RFQP' Jibuti [PQB] B: 24 h encrypted tfc after "KKKK..." to 'RFQP' [PQB]
10953.0	HBD 20	MFA Berne, SUI	SITOR-A: 0750-1545 tfc or tfc to HBD 40 Belgrade or msg (5lgs) or msg (G/F nx)
	HBD 40	Swiss E Belgrade, SRB	SITOR-A: 1410 msg to HBD 20 Berne
10956.7	'RFTJF'	FF Port Bouet, CTI	ARQ-E3 48 Bd: 0322 "controle de voie", 0712+2200 tfc [JFD]
10960.7	'RFFP'	MOD Paris, F	ARQ-M2 200 Bd: A: 0700-1238 msg (5lgs) after "BBBB" + AFTN msgs to 'RFFVAY' Sarajevo [FDXA, PVX] B: 0700-1852 AFTN msgs to 'RFFVAY' [FDXB, PVX, RVA]
10962.2	'RFFVAY'	FF Sarajevo, BIH	ARQ-M2 200 Bd: A: 0836-2121 tfc B: 0934 operational msg to 'RFFP' Paris, 1407 tfc to 'RFFP' [FKWB]
10963.0	HBD 20	MFA Berne, SUI	SITOR-A: 0638-1621 tfc to HBD 37 Bucharest or msg or msg (G/F nx)
	HBD 37	Swiss E Bucharest, ROU	SITOR-A: 0852 msg (5lgs) + final tfc to HBD 20 Berne, s. off
	HBD 51	Swiss E El Djaza'ir, ALG	SITOR-A: 1204 msgs to HBD 20 Berne
10966.0	FDI 22	FAF Narbonne, F	CW
	GYA	RN London, G	ITA2 75 Bd: 0900 clg MTT
10967.0	HBD 20	MFA Berne, SUI	SITOR-A: 0820-1330 tfc or msgs (5lgs)
10967.7	'RFFA'	MOD Paris, F	ARQ-E3 200 Bd: 0737-1955 tfc or operational msg or msg (F press review) or msg (5lgs) after "BBBB" to 'RFFVAT' Incirlik [FDX]

10971.0	HBD 20	MFA Berne, SUI	SITOR-A: 0800-1621 tfc or msg or msg (5lgs) or msg (F nx) or msg (G nx) or tfc to HBD 44 Stockholm or HBD 55 Madrid
	HBD 44	Swiss E Stockholm, S	SITOR-A: 1006+1338 tfc to HBD 20 Berne
	HBD 55	Swiss E Madrid, E	SITOR-A: 0811 msg to HBD 20 Berne
10973.0	HBD 20	MFA Berne, SUI	SITOR-A: 1025 msgs (5lgs) to Helsinki
	HBD ..	Swiss E Helsinki, FNL	SITOR-A: 1025 tfc to HBD 20 Berne
10980.0	*RDD 79*	*Moscow Meteo, RUS*	*FAX // 53.6 kHz $*
10991.7	'RFFVAY'	FF Sarajevo, BIH	ARQ-M2 200 Bd: A: 0640-2125 msg or AFTN msg or msg (5lgs) after "BBBB" to 'RFFP' Paris [FKWA] B: 1416+1436 AFTN msg [FKWB]
10993.7		Algerian E Habana, CUB	Coquelet 8: 2102 msgs to 7RQ 20 El Djaza'ir
10997.0	7RP 20	Algerian E Paris, F	Coquelet 8: 0833+0940+1442 msgs to 7RQ 20 El Djaza'ir
		Algerian E Brussels, BEL	Coquelet 8: 0908 msgs to 7RQ 20 El Djaza'ir
		Algerian E Vienna, AUT	Coquelet 8: 0920 msgs to 7RQ 20 El Djaza'ir
10998.8		UNID USAF AWS st. (996)	ITA2 75 Bd: 2100 wx
11003.0	'RFFXQA'	FF Sarajevo, BIH	ARQ-E 72 Bd: 0838 msg to 'RFFX' Paris, 1212+2108 tfc to 'RFFX' [UQA]
11007.0	'DOR'	MFA Sofia, BUL	IRA-ARQ 210 (!) Bd: 1820 msg (5fgs)
11012.0		UNID teleprinter	81
11013.7		UNID Eg. dipl. st. (796)	SITOR-A: 1623 ATU-A tfc
11015.0	VJN	RFDS Cairns, QLD, AUS	SSB
11016.4	GXQ	BA London, G	VFT: ITA2 50 Bd: 0642-2041 ryi
11017.0	'RPFN'	PN Lisbon, POR	ITA2 75 Bd: 0844+1500 clg 'RPTIH' Horta
11022.5	OVC	DM Groennedal, GRL	CW
11023.7		Egyptian E London, G	SITOR-A: 1300 final ATU-A tfc to Cairo, s. off; 1717 ATU-A msgs to Cairo
11025.0	'RFFX'	MOD Paris, F	ARQ-E 184 Bd: 1623 operational msg to 'RFFXQA' Sarajevo
11026.7		MFA Cairo, EGY	SITOR-A: 1450+1521+1537 ATU-A msgs or msg (5lgs) to Tripoli
11030.0	*AXM 34*	*Melbourne Met., VIC, AUS*	*FAX // 2628.0 kHz $*
11033.0	'K4X'	French E Tunis, TUN	FEC-A 384 Bd: 1400 msg (5lgs) after "BBBB" + test to 'RFGW' Paris
11037.0	'D2Z'	French E Budapest, HNG	FEC-A 192 Bd: 1656 tfc to 'P6Z' Paris
11039.0	DDH 9	Hamburg Meteo, D	ITA2 50 Bd: 0655-2014 ry or wx
11042.0	'J5W'	French E Rabat, MRC	FEC-A 192 Bd: 1032 msg (5lgs) to 'P6Z' Paris
	'L4N'	French E Dakar, SEN	FEC-A 192 Bd: 0915 msg (5lgs) to 'P6Z' Paris

11043.7	**'RFTJD'**	**FF Libreville, GAB**	**ARQ-E3 192 Bd: 1144-0019 "controle de voie" or tfc to 'RFTJ' Dakar [JDJ]**
11046.9	**SAM**	**MFA Stockholm, S**	**SWED-ARQ: 0709-1833 msgs or msgs (5lgs) to various embassies**
	SAM 37	**Swedish E Bucharest, ROU**	**SWED-ARQ: 0920 msg to SAM Stockholm**
	SAM ..	**Swedish E Moscow, RUS**	**SWED-ARQ: 1015 msg (E press review) to SAM Stockholm**
	SAM ..	**Swedish E Zagreb, HRV**	**SWED-ARQ: 1833 tfc to SAM Stockholm**
11049.0	**'G8T'**	**French E Belgrade, SRB**	**FEC-A 192 Bd: 1053 msgs (5lgs) to 'P6Z' Paris, 1531 + 1551 msg (5lgs) after "BBBB" to 'RFGW' Paris**
11050.0	**'D2Z'**	**French E Budapest, HNG**	**FEC-A 192 Bd: 1116 + 1357 + 1500 clg 'P6Z' Paris**
11052.0	**AFA**	**USAF Andrews, MD, USA**	**SSB**
	'H6L'	**French E El Djaza'ir, ALG**	**FEC-A 192 Bd: 1742 msgs (5lgs) after "BBBB" to 'RFGW' Paris, final tfc, s. off**
11053.0	**'DOR'**	**MFA Sofia, BUL**	**ITA2 150 Bd: 1335 tfc**
11054.3	**'DOR'**	**MFA Sofia, BUL**	**ITA2 75 Bd: 1405 tfc "ZAL 13950, 18232, 12226, 13964"**
11055.0	**AFA**	**USAF Andrews, MD, USA**	**SSB**
11058.5	**AFA**	**USAF Andrews, MD, USA**	**SSB**
11060.0	**8AA**	**IN Jakarta, INS**	**CW**
11063.0	**LZU 2**	**Sofia Meteo, BUL**	**ITA2 50 Bd: 0601-1750 ry or wx**
11068.0		**UNID teleprinter**	**CIS 10-11-11 MFSK**
11072.0		**UNID teleprinter**	**CIS 10-11-11 MFSK**
11072.5	**'P6Z'**	**MFA Paris, F**	**FEC-A 192 Bd: 0718 + 0740 + 1440 + 1537 tfc or clg 'K4X' Tunis or msg (5lgs) to 'U3H' Moscow**
11077.0		**Polish E Bucharest, ROU**	**POL-ARQ 100 Bd: 1002 tfc to SNN 299 Warsaw, 1344 msg to SNN 299**
11080.0		**SANA Damascus, SYR**	**ITA2 50 Bd: 0700-2000 A/E/F nx**
11083.0		**UNID US military station (796)**	**HARCO-39 MFSK 200 Bd: 1708 tfc**
11085.0	**'RFGW'**	**MFA Paris, F**	**FEC-A 192 Bd: 1017 msg (5lgs) after "BBBB" to 'G8T' Belgrade, 1348 msg (5lgs) + msg + tfc to 'D6Z', 1528 tfc to 'G8T' [REX]**
11086.5	**GYU**	**RN Gibraltar, GIB**	**Piccolo 6: 1530-1607 clg MUH 25**
11090.0	*KVM 70*	*Honolulu Meteo, HWA*	*FAX // 9982.5 kHz $*
11092.4	**'DOR'**	**MFA Sofia, BUL**	**ITA2 100 Bd: 1220 msg (Bulgarian nx)**
11104.5		**UNID teleprinter**	**MFSK**
11105.0		**Belgian E Cairo, EGY**	**VFT: ITA2 100 Bd: 0729 msg to Brussels**
		Belgian E Tunis, TUN	**VFT: ITA2 100 Bd: 1010 msg + msg (5lgs) + final tfc "en graag tot morgen bibi" to Brussels, s. off**
		MFA Brussels, BEL	**VFT: ITA2 100 Bd: 1009 msg to Ankara**

11110.5	'RFLI'	FF Fort de France, MRT	ARQ-E3 192 Bd: 24 h msgs or "controle de voie" to 'RFFA' Paris [BFL]
11112.0	RLX	SOUD Moscow, RUS	ITA2 75 Bd: 1625 msg (5lgs) to 'UXW'
11118.0		USAF AWS Ceiba, PTR	ITA2 75 Bd: 1400-0222 wx
11120.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 1000 msg (E nx)
11122.0		*USAF AWS Ceiba, PTR*	*FAX // 3232.0 kHz*
11125.0	HZN	Jeddah Meteo, ARS	ITA2 100 Bd: 0352-1931 wx
11129.5	MKK	RAF London, G	ITA2 50 Bd: 0530 ryi
11132.0		Sydney Air, NSW, AUS	SSB
11133.0		BNDVB Athens, GRC	ARQ-E 96 Bd: 0531+0730+0745+0902+1235 encrypted tfc to Bonn
11138.7	PWN	BN Natal, B	ITA2 75 Bd: 1258+1315 tfc, 2149 msg
11139.0	PWB	BN Belem, B	ITA2 75 Bd: 0819 clg PWN Natal
	'DFZG'	MFA Belgrade, SRB	ITA2 75 Bd: 0531-1647 ry or msg (E nx) or encrypted msg after "XYXYXY..."
11151.0		Polish E Beirut, LBN	POL-ARQ 100 Bd: 1555 tfc to SNN 299 Warsaw
11153.0	'RPTI'	PN Ponta Delgada, AZR	ITA2 75 Bd: 1031 clg + tfc to 'RXFI' Lisbon
11154.0		MFA Zagreb, HRV	ITA2 75 Bd: 1044 msg
11155.0	RIT	CISN Vaygach, RUS	CW
11155.5	GYU	RN Gibraltar, GIB	Piccolo 6: 0900+1525+1634 operational msg, 2028 foxes
11160.0		UNID teleprinter	75
11165.0		UNID station (996)	ALIS-2 241 Bd: 1315 I tfc
11173.5	'P6Z'	MFA Paris, F	FEC-A 192 Bd: 1449 clg 'G8T' Belgrade CW
	'RFGW'	MFA Paris, F	FEC-A 192 Bd: 0725+1357 tfc, 1522 msgs, 1630 tfc
11174.0	'KIT'	Bulgarian E Kiyev, UKR	ITA2 75 Bd: 1130 msgs to 'DOR' Sofia

11175.0 - 11275.0 AERONAUTICAL MOBILE (OR)

11175.0		AMS many USAF stations	SSB
11178.0		AMS	SSB
11181.0		AMS	SSB
	AFA	USAF Andrews, MD, USA	
	AFE	USAF MacDill, FL, USA	
	AFI	USAF McClellan, CA, USA	
	AGA	USAF Hickam AFB, HWA	
	AJE	USAF Croughton, G	
11181.7		MFA Cairo, EGY	SITOR-A: 1327 ATU-A msgs to Khartoum
11184.0		AMS	SSB
11187.0		AMS	SSB
11187.5	AXJ	RAAF Perth, WA, AUS	COMB
11190.0		AMS	SSB
11192.0	CSY	Santa Maria Air, AZR	ITA2 50 Bd: 0928-2251 msgs [MZA]

11193.0		AMS	SSB
		AEROFLOT Moscow, RUS	
11196.0		AMS	SSB
11199.0		AMS	SSB
11200.0		IFOR Warsaw, POL	SSB
11202.0		AMS	SSB
	NMF	USCG Boston, MA, USA	
	NMG	USCG N. Orleans, LA, USA	
	NMN	USCG Portsmouth, VA, USA	
	NMR	USCG San Juan, PTR	
	NOJ	USCG Kodiak, ALS	
11205.0		AMS	SSB
	MQP	RAF Upavon, G	
	MUL	RAF Stanley Field, BLZ	
11208.0		AMS	SSB
11211.0		AMS	SSB
11212.0	MKL	RAF Edinburgh, G	CW
11214.0		AMS	SSB
	AFA	USAF Andrews, MD, USA	
	CHR	CF Trenton, ONT, CAN	
	VXA	CF Edmonton, ALTA, CAN	
11217.0		AMS	SSB
	AFE	USAF MacDill, FL, USA	
	AFH	USAF A. AFB, Balboa, PNR	
	AFS	USAF Offutt AFB, NE, USA	
	DHM 91	GAF Münster, D	
	XPH	USAF Thule AFB, GRL	
11220.0		AMS	SSB
	AFA	USAF Andrews, MD, USA	
	XPH	USAF Thule AFB, GRL	
11222.0		Stockholm Air, S	SSB
11223.0		AMS	SSB
11226.0		AMS	SSB
	AFA	USAF Andrews, MD, USA	
	AFE	USAF MacDill, FL, USA	
	AFE 83	USAF Wideawake, ASC	
	AFI	USAF McClellan, CA, USA	
	AFS	USAF Offutt AFB, NE, USA	
	AGA	USAF Hickam AFB, HWA	
	AIE	USAF Andersen AFB, GUM	
	AJE	USAF Croughton, G	
	CMI	CUBANA Habana, CUB	
	CUW	PAF/USAF Lajes AFB, AZR	
11228.0		ANI Patriot Hills, ATA	SSB
		ANI Puntas Arenas, CHL	SSB
11229.0		AMS	SSB
	AFA	USAF Andrews, MD, USA	
	AFE	USAF MacDill, FL, USA	
	AJE	USAF Croughton, G	
11232.0		AMS	SSB
		many CF stations	
11234.0	GFW	RAF Akrotiri, CYP	SSB
	MLU	RAF Gibraltar, GIB	SSB
	MQP	RAF Upavon, G	SSB
		RAF Stanley, FLK	SSB
		RAF Wideawake, ASC	SSB
11235.0		AMS	SSB
	AXF	RAAF Sydney, NSW, AUS	
	AXH	RAAF Townsv., QLD, AUS	
	AXI	RAAF Darwin, NT, AUS	

11235.0	AXJ	RAAF Perth, WA, AUS	
	ZKX	RNZAF Auckland, NZL	
11238.0		AMS	SSB
11240.0	BSQ	CAAC Beijing, CHN	SSB
11241.0		AMS	SSB
11244.0		AMS	SSB
	AFA	USAF Andrews, MD, USA	
	AFE	USAF MacDill, FL, USA	
	AFI	USAF McClellan, CA, USA	
	AFS	USAF Offutt AFB, NE, USA	
	AJE	USAF Croughton, G	
	AJO	USAF Adana, TUR	
	AKA	USAF Elmendorf AFB, ALS	
	XPH	USAF Thule AFB, GRL	
11245.5	OVC	DM Groennedal, GRL	SSB
	OVL	DM Torsh., Faroe Is., DNK	SSB
	OWD	DAF Vaerloese, DNK	SSB
11247.0		AMS	SSB
	GFW	RAF Akrotiri, CYP	
	MLU	RAF Gibraltar, GIB	
	MQP	RAF Upavon, G	
		RAF Stanley, FLK	
		RAF Wideawake, ASC	
11250.0		AMS	SSB
	AXF	RAAF Sydney, NSW, AUS	
11251.4		**Tamanrasset Prefecture, ALG**	**Coquelet 8: 1404 msgs to 7RA 20 El Djaza'ir**
11253.0		AMS	SSB
	MVU	RAF London, G	
11256.0		AMS	SSB
	ETK 4	EA Addis Ababa, ETH	
11259.0		AMS	SSB
11262.0		AMS	SSB
11265.0		AMS	SSB
11267.0	AXJ	RAAF Perth, WA, AUS	SSB
11268.0		AMS	SSB
11270.5	DHN 66	GAF Geilenkirchen, D	SSB
	INY	IAF Bari, I	SSB
11271.0		AMS	SSB
11273.0		BBA Sofia, BUL	SSB
11274.0		CISAF Moscow, RUS	SSB

11275.0 - 11400.0 AERONAUTICAL MOBILE (R)

11276.0	AMS = 2A 2C 6G 10E 13J	SSB
11279.0	AMS = NAT, 2B 6F 9C	SSB
11282.0	AMS = CEP, 4A 6G 13H	SSB
11285.0	AMS = 2A 3B 7	SSB
11288.0	AMS = 5A 6G 11B	SSB
11291.0	AMS = SAT, 3B 3C	SSB
11291.7	**MFA Cairo, EGY**	**SITOR-A: 1459 msgs (5lgs) + ATU-A msg to Windhoek, 1615 ATU-A msgs to Paris, 1817 tfc, 1850 ATU-A msgs + msg (5lgs)**
11294.0	AMS = 2A 6G 7C	SSB
11297.0	AMS = 2 12F	SSB
11300.0	AMS = AFI, 6G 13H	SSB
11303.0	AMS = 3C 13E	SSB
11306.0	AMS = 6G 7E 11B	SSB

11309.0		AMS = NAT, 3A 6D	SSB
11312.0		AMS = 5 9C 9D	SSB
11315.0		AMS = 6G, VCAR	SSB
11318.0		AMS = 3 4A 13D	SSB
11321.0		AMS = 6A 13F	SSB
11324.0		AMS = 3A 3C 4B 12C	SSB
11327.0		AMS = SP, 3B 5 13C	SSB
11327.5		**MFA Oslo, NOR**	**TWINPLEX YYBB BYBY: SITOR-A: 0724 tfc, 0842 msg (N nx), 1015 + 1250 tfc, 1305 msg, 1319 tfc**
11330.0		AMS = AFI NP, 3A 13F	SSB
11333.0		AMS = 2B 2C 10	SSB
11336.0		AMS = NAT, 3	SSB
11339.0		AMS = 2B 6B 9 13K	SSB
11342.0		AMS = W II/III	SSB
11345.0		AMS = W I/IV	SSB
11348.0		AMS = W II/V	SSB
11351.0		AMS = W I/III	SSB
11354.0		AMS = W II/V	SSB
11356.0	IBC	IAF Rome, I	SSB
11357.0		AMS = 6A 6E 10A	SSB
11360.0		AMS = SAM, 2 3 14	SSB
11363.0		AMS = 1 6E 10A	SSB
11366.0		AMS = 1C 6B 6F 13K	SSB
11369.0		AMS = 6G 13G	SSB
11372.0		AMS = 2C 3B 6D	SSB
11375.0		AMS = MID, 10A 13C	SSB
11378.0		AMS = 3C 13M, VEUR	SSB
11381.0		AMS = 6 12E 12J	SSB
11384.0		AMS = CWP, 1D 12J	SSB
11387.0		AMS = CAR, VSEA	SSB
11390.0		AMS = 2 10	SSB
11393.0		AMS = 9B 12E, VMID	SSB
11396.0		AMS = CAR EA SEA	SSB

11400.0 - 11600.0 FIXED

11405.0	**4UZ**	**UNO Geneva, SUI**	**PACTOR: 0805 tfc to Cotonou, 1605 tfc to Kampala, 1810 msg**
		UNO Kampala, UGA	**PACTOR: 1605 tfc to 4UZ Geneva**
11410.0	**OMZ 66**	**MFA Bratislava, SVK**	**IRA-ARQ 200 Bd: 1315 tfc to Moscow**
11411.5	**GXQ**	**BA London, G**	**VFT: ITA2 50 Bd: 0702-1716 ryi**
11415.0	NPN	USN Apra Harbour, GUM	COMB
11417.0	OLX	Prague, CZE	CW
11420.0	*BDF*	*Shanghai Meteo, CHN*	*FAX // 5100.0 kHz*
		MFA Bucharest, ROU	**RUM-FEC 164 Bd: 1913 msg to Washington**
11421.7	**FJY 5**	**DTRE Base Alfred-Faure, CRO**	**ARQ-E3 96 Bd: 0920 msgs to FJY 2 Port-aux-Francais**
11423.5	**SOL 242**	**PAP Warsaw, POL**	**SITOR-B: 1400 + 1800 Polish nx**
11424.5	**'DOR'**	**MFA Sofia, BUL**	**ITA2 180 Bd: 1257 msgs**
11425.0		**MFA Bucharest, ROU**	**RUM-FEC 164 Bd: 1553 msg (Romanian nx), 1605 tfc, 1904 clg 'L8S', 1912 msg to Brussels**
			CW

11430.0	HMF 55	KCNA Pyongyang, KRE	ITA2 50 Bd: 0400-0600+1000-1200 E nx, 1230-1430 R nx wca, 1500-1700 E nx, 2130-2400 F nx
11430.5	MKD	RAF Akrotiri, CYP	Piccolo 6: 1736 tfc to MUH
11431.7		Egyptian E Athens, GRC	SITOR-A: 1705 ATU-A msg to Cairo
11433.0		Romanian E Moscow, RUS	RUM-FEC 218 Bd: 1353 msg to Bucharest
11434.5	'C37A'	MOSSAD Tel Aviv, ISR	ARQ-E 288 Bd: 1850 encrypted tfc to '6XM8' BNDVB Bonn, s. off ITA2 100 Bd: 1855 clg '6XM8' BNDVB Bonn
11437.8		MFA Oslo, NOR	TWINPLEX YYBB YBYB: SITOR-A: 0745 msg (N nx), 0820+1000 tfc
11447.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 0903 msg (Polish nx), 0913 msgs to various embassies
		Polish E Moscow, RUS	POL-ARQ 100 Bd: 0836 msgs to SNN 299 Warsaw
11453.0	IMB 3	Rome Meteo, I	ITA2 50 Bd: 24 h ry or wx
11455.0	*VLM*	*Casey Meteo, ATA*	*FAX // 7470.0 kHz* $
11457.0		UNID teleprinter	75
11459.0	DMK	MFA Bonn, D	ALIS: 0755+0904 tfc, 1136 tfc to Cairo, 1305 tfc
		German E Cairo, EGY	ALIS: 1136 msgs to DMK Bonn
11460.0	AFA	USAF Andrews, MD, USA	SSB
	AFE	USAF MacDill, FL, USA	SSB
11463.0		Italian E Warsaw, POL	ARQ-E 96 Bd: 0745+0818 tfc to Rome, 0940+0946+1020 msg to Rome
11466.0	AFA	USAF Andrews, MD, USA	SSB
11467.0	SNN 299	MFA Warsaw, POL	ITA2 75 Bd: 0600 msg (Polish nx), 0623-0747+1554 ry or msg
11471.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 0721+0818+0950+1700 msg (Polish nx) CW
11476.0	HMF 52	KCNA Pyongyang, KRE	ITA2 50 Bd: 0400-0730+1230-1430+1800-2100+2130-2300 E nx *FAX 60/352: 0030-0100+2330-0000 E/Korean/J nx or pix*
11480.0		MFA Rome, I	ARQ-E 96 Bd: 0745+0925 tfc, 0940+1458+1505 msgs (5lgs)
11485.0		UNID teleprinter	CIS 10-11-11 MFSK
11486.7		Egyptian E Baghdad, IRQ	SITOR-A: 1349 clg + msg (5lgs) to Cairo SITOR-B: 1345 ATU-A tfc to Cairo
11494.6	5AF	Tripoli Air, LBY	ITA2 50 Bd: 1310+1328+1526+1928 ry
11509.0	A2SK	Gaborone Air, BOT	ITA2 75 Bd: 0900 msg
11518.2	'RFFP'	MOD Paris, F	ARQ-M2 200 Bd: A: 0736-1444 tfc or AFTN msgs to 'RFFVAY' Sarajevo [FDXA]
11520.0		UNID station (796)	CIS-14 96 Bd: A/B: 0547+0703 R tfc wca
11521.0	'DOR'	MFA Sofia, BUL	ITA2 120 Bd: 1201 msg to Moscow

11536.0	HMF 49	KCNA Pyongyang, KRE	ITA2 50 Bd: 0400-0600+0800-1000 E nx, 1145-1430+1800-2100 F nx
11537.0	DMK	MFA Bonn, D	ALIS: 1008+1325 tfc
11538.3		German E Addis Ababa, ETH	ARQ-E 96 Bd: 1953 msg to DMK Bonn
		German E Athens, GRC	ARQ-E 96 Bd: 0950 encrypted msg to DMK Bonn
11540.0	DMK	MFA Bonn, D	ALIS: 0711+1119+1123 tfc
		German E Moscow, RUS	ARQ-E 96 Bd: 1015 encrypted msg to DMK Bonn
		German E Vilnius, LTU	ARQ-E 96 Bd: 0820 encrypted msg to DMK Bonn
11541.0	IER 20	IFG Rome, I	ALIS: 0705 final tfc, s. off; 0828+1008 tfc
11541.7	'RFLI'	FF Fort de France, MRT	ARQ-E3 96 Bd: 0429-1352+1857 "controle de voie" or tfc [LIH]
11548.0	AFE 70	USAF Cape Can., FL, USA	SSB
	4XZ	IN Haifa, ISR	CW
11550.0	MKK	RAF London, G	VFT: ITA2 50 Bd: 24 h ryi
11551.7	FJY 4	DTRE Martin de Vivies, AMS	ARQ-E3 96 Bd: 0900 msgs to FJY 2 Port-aux-Francais, 1119 tfc to FJY 2; QSX 10112.0 kHz
11553.0	NGD	USN McMurdo Sound, ATA	SSB
	NHG	USN Palmer Station, ATA	SSB
11564.0		UNID teleprinter	MFSK
11570.0	BZC 75	Ürümqi Meteo, CHN	ITA2 50 Bd: 0056+0113+0358+0728+0737 ry or wx
	ZLQ	Scott Base, ATA	SSB
	9MR	MN Johor Baharu, MLA	ITA2 50 Bd: 0728+0945+1116 ry
11572.0	'P6Z'	MFA Paris, F	FEC-A 192 Bd: 0551 msgs (5lgs) to 'U3H' Moscow, 0846 tfc to 'G8T' Belgrade, 1424 clg 'A9C' Bucharest
11575.0	RVL 29	R Moscow feeder, RUS	SSB
11576.7	FJY 3	DTRE Dumont d'Urville, ATA	ARQ-E3 96 Bd: 0030+0810+0920 msgs to FJY 2 Port-aux-Francais
11585.0	VZ8 SK	SDE Katherine, NT, AUS	SSB

11600.0 - 11650.0 BROADCASTING FIXED <SSB only, as from 01 April 2007>

11602.5	6MK 64	YONHAP Soul, KOR	ITA2 50 Bd: 0030+0700+0800+1200 E nx *FAX 120/576: 0650+0715+0737 Korean nx (text)*
11620.0	HLL 3	Soul Meteo, KOR	CW
11625.0	'DOR'	MFA Sofia, BUL	IRA-ARQ 300 Bd: 1214 encrypted msg after "CCCC..."
11634.0	AFE 83	USAF Wideawake, ASC	SSB
11638.0	DDK 8	Hamburg Meteo, D	ITA2 50 Bd: 24 h ry or wx
11645.0	HLL 6	Soul Meteo, KOR	ITA2 50 Bd: 0900 ry, wx

11650.0 - 12050.0 BROADCASTING <530>

11665.0		UNID teleprinter	75

12050.0 - 12100.0 BROADCASTING <SSB only, as from 01 April 2007> FIXED

12065.0	VHC	RAN Canberra, ACT, AUS	Piccolo 6: 1710 operational tfc to GFH Kai Tak
12065.5	8AA	IN Jakarta, INS	CW
12070.0		many USACE stations, USA	SSB
12072.5	TNL	ASECNA Brazzaville, COG	ARQ-M2 96 Bd: A: 0845+1218+1616 msgs [FKA] B: 0845+1218+1616 wx with WMO headings
12075.0	VVD 62	Delhi Meteo, IND	ITA2 50 Bd: 24 h wx
12090.2	'RFTJ'	FF Dakar, SEN	ARQ-E3 192 Bd: 24 h "controle de voie" or tfc or msg (5lgs) to 'RFFA' Paris [AFL]

12100.0 - 12230.0 FIXED

12101.9	SAM	MFA Stockholm, S	SWED-ARQ: 0952+1035+1440 msg (5lgs)
12103.1	SAM	MFA Stockholm, S	SWED-ARQ: 0614-1001 tfc or msg (5lgs) after "KCKC SSSLLL SSSLLL SSSLLL" to various embassies
	SAM ..	Swedish E Zagreb, HRV	SWED-ARQ: 0755 tfc to SAM Stockholm
12104.0	8WD 5	MFA Delhi, IND	ITA2 50 Bd: 1000 msgs to Kabul, 1228 tfc + msg to Kabul
12107.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1400 msgs
12108.5	7RQ 20	MFA El Djaza'ir, ALG	Coquelet 8: 1325 msg (F press review) to various European embassies
12110.0	YOM 21	ROMPRES Bucharest, ROU	ITA2 50 Bd: 1100+1200 E nx
12110.5	MKK	RAF London, G	Piccolo 6: 1236 "pal" tfc to MUH
12112.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 0700 encrypted tfc, 1043 msg (Bulgarian nx)
12112.5	EAE 220	MFA Madrid, E	TWINPLEX YYBB YBYB: SITOR-A: 0840 msg (10lgs)
12114.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 0926+0951 msg (Bulgarian nx), 1035 tfc
12115.0	GXQ	BA London, G	VFT: ITA2 75 Bd: 0718+0921+1131+1522+1529 encrypted tfc VFT: ARQ-M2 96 Bd: A: 0928+1039+1528 wx
12118.0		MFA Rome, I	ARQ-E 96 Bd: 0917 msg to various embassies
12120.0	ZLK 43	USN Christchurch, NZL	SSB
12124.0	FXR	Saint Denis Meteo, REU	SSB
	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 0725-1217 ry or msgs to Moscow or msg (E press review) or msgs

12124.0		MFA Oslo, NOR	TWINPLEX YYBB BYBY 200-400-200: SITOR-A: 0740 tfc + msg (N nx "Pressekontoret") to Belgrade
		Norwegian E Belgrade, SRB	TWINPLEX YYBB BYBY 200-400-200: SITOR-A: 0740 tfc to Oslo
12125.0		Polish E Cologne, D	POL-ARQ 100 Bd: 1700 msg (Polish press review) to SNN 299 Warsaw
12127.5	VHC	RAN Canberra, ACT, AUS	COMB
12130.0	DMK	MFA Bonn, D	ARQ-E 96 Bd: 0830 msgs, 0905 tfc, 1000 msg
	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 0822 schedule
12130.5	MKK	RAF London, G	Piccolo 6: 1600 clg MUH, 1637 operational msg
12133.0	GKX	Portishead Air, G	SSB
12133.7	'DOR'	MFA Sofia, BUL	IRA 300 Bd: 0905+1102 encrypted tfc
12138.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 0700 tfc, 1139 ry, msgs
12140.0	HWN	FN Paris, F	ITA2 150 Bd: 0513-2231 ry
		USP Suva, FJI	SSB
12145.0	MKK	RAF London, G	VFT: ITA2 50 Bd: 1043-2045 ryi
12147.0		UNID teleprinter	81
12150.0		MFA Rome, I	ARQ-E 96 Bd: 1000 msgs (5lgs) to various East European embassies, 1045 msgs, 1553 msg (5lgs) to Warsaw
12152.0	LZG 7	Sofia, BUL	ITA2 75 Bd: 1215 tfc, s. off
12160.0		UNID teleprinter	CIS 10-11-11 MFSK
12165.0	*RKB 78*	*Moscow Meteo, RUS*	*FAX // 53.6 kHz $*
12170.0		UNID station (896)	CIS-14 96 Bd: A/B: 0547+0703 R tfc wca
12172.0	PWX	BN Brasilia, B	ITA2 75 Bd: 1300 ry, 1552 tfc
12173.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 0810 msg (5fgs) + msg (Polish press review), 0944 msgs to Brussels, 1441 msgs to Tokyo
12175.0	HMF 42	KCNA Pyongyang, KRE	ITA2 50 Bd: 0400-0600+1830-2100+2130-2300 E nx
	RCD 34	R Moscow feeder, RUS	SSB
	TAD	MFA Ankara, TUR	FEC-A 144 Bd: 1120 encrypted tfc
		UNID teleprinter	MFSK
12179.8	'TFB'	MOSSAD Tel Aviv, ISR	VFT: FEC-A 192 Bd: 1300 msg (5lgs)
12186.0		JANA Tripoli, LBY	ITA2 50 Bd: 1400+1500+1600 F nx, 1700+1800+1900 E nx
12190.0	'DOR'	MFA Sofia, BUL	ITA2 150 Bd: 0837+0847 msg (Bulgarian nx), 0959 msg (5lgs), 1039 msg msg (Bulgarian nx)
12190.2	'RFVI'	FF Le Port, REU	ARQ-E3 100 Bd: 1055+1348 tfc, 1733 "controle de voie" [VII]
12198.3	'DOR'	MFA Sofia, BUL	IRA 600 Bd: 0759 encrypted tfc
12200.5		UNID station (896)	ITA2 75 Bd: 0756 tfc "fow bk pse short 6"
12204.8	'DOR'	MFA Sofia, BUL	IRA 600 Bd: 0801 encrypted tfc, into ITA2 75 Bd: 0802 tfc

12205.0	MKD	RAF Akrotiri, CYP	Piccolo 6: 1222 tfc "back at greens pal what was prob?"
		UNID teleprinter	ITA2 75 encrypted
12207.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1418 msgs to Berne
12208.0	OMS	MFA Bratislava, SVK	ITA2 100 Bd: 0858 msg (Slovak nx), 1030 msgs, 1100 msg (Slovak nx)
	OMZ 66	MFA Bratislava, SVK	ITA2 50 Bd: 0835 ry
12209.1	'DOR'	MFA Sofia, BUL	IRA 600 Bd: 0804+1233 encrypted tfc
12210.0	OLZ	MFA Prague, CZE	ITA2 100 Bd: 0713-0840 msg (Czech nx)
		Slovak E Beirut, LBN	ITA2 214 (!) Bd: 1153 msgs to OMS Bratislava
12212.5	YZI 234	TANJUG Belgrade, SRB	ITA2 50 Bd: 1100+1200+1300+1600 E nx
12215.5	*ZKRT*	*Rarotonga R, CKH*	*FAX 120/576: 1905 surface analysis*
12216.0	OLZ	MFA Prague, CZE	ITA2 100 Bd: 0713-1217 tfc or msgs or msg (Czech nx)
	WGY 9..	many FEMA stations, USA	SSB
		UNID Italian diplomatic station (396)	ARQ-E 96 Bd: 1521 msg (5lgs), s. off
12218.0		UNID teleprinter	75
12219.5		UNID teleprinter	96
12219.7		MFA Cairo, EGY	SITOR-A: 1851 final ATU-A tfc, s. off
12224.5	'C37A'	MOSSAD Tel Aviv, ISR	ARQ-E 288 Bd: 0839+1100+1815+1935 encrypted tfc to '6XM8' BNDVB Bonn
			ITA2 100 Bd: 1815 clg '6XM8' BNDVB Bonn, 1935 final tfc to '6XM8'
12225.0	HDN	EN Quito, EQA	ITA2 75 Bd: 0140 msgs
12227.0	SAM	MFA Stockholm, S	SWED-ARQ: 0952 msg to SAM 26 London, 1100 tfc to SAM 37 Bucharest, 1458 msg (5lgs)
	SAM 26	Swedish E London, G	SWED-ARQ: 0952 tfc to SAM Stockholm
	SAM 37	Swedish E Bucharest, ROU	SWED-ARQ: 1100 msg to SAM Stockholm
	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 0740 encrypted msgs
12228.0	SNN 299	MFA Warsaw, POL	ITA2 75 Bd: 0428-1800 ry or msg or msg (E nx) or msg (Polish nx) or "tfc list" to European embassies

12230.0 - 13200.0 MARITIME MOBILE <500A 500B 520B 529A>

12230.0		ship stations, ch 1201	SSB	QSX 13077.0 kHz
12233.0		ship stations, ch 1202	SSB	QSX 13080.0 kHz
	WCM	Withamsville R, OH, USA		
12235.0	7CB	IN Belawan, INS	CW	
12236.0		ship stations, ch 1203	SSB	QSX 13083.0 kHz
12239.0		ship stations, ch 1204	SSB	QSX 13086.0 kHz

12239.0		**UNID station (996)**	**ITA2 75 Bd: 0808 + 1400 + 1428 msgs (5lgs)**
12242.0		ship stations, ch 1205	SSB QSX 13089.0 kHz
12245.0		ship stations, ch 1206	SSB QSX 13092.0 kHz
12248.0		ship stations, ch 1207	SSB QSX 13095.0 kHz
12251.0		ship stations, ch 1208	SSB QSX 13098.0 kHz
12254.0		ship stations, ch 1209	SSB QSX 13101.0 kHz
12256.5	**7RP 20**	**Algerian E Paris, F**	**Coquelet 8: 0925 msgs to 7RQ 20 El Djaza'ir**
12257.0		ship stations, ch 1210	SSB QSX 13104.0 kHz
	7RQ 20	**MFA El Djaza'ir, ALG**	**Coquelet 8: 1040 msgs to 7RP 20 Paris**
12260.0		ship stations, ch 1211	SSB QSX 13107.0 kHz
12262.5	**HGX 21**	**MFA Budapest, HNG**	**DUP-ARQ: 0543-1546 tfc or msgs or msgs (5fgs) to HGX 22 Athens or HGX 23 Rome or HGX 41 Damascus**
12263.0		ship stations, ch 1212	SSB QSX 13110.0 kHz
12264.5	**HGX 22**	**Hungarian E Athens, GRC**	**DUP-ARQ: 0940 msg to HGX 21 Budapest**
	HGX 23	**Hungarian E Rome, I**	**DUP-ARQ: 0710 msgs to HGX 21 Budapest, 1158 tfc + msgs (5fgs) + msg to HGX 21**
	HGX 41	**Hungarian E Damascus, SYR**	**DUP-ARQ: 1746 tfc to HGX 21 Budapest**
12266.0		ship stations, ch 1213	SSB QSX 13113.0 kHz
12269.0		ship stations, ch 1214	SSB QSX 13116.0 kHz
12272.0		ship stations, ch 1215	SSB QSX 13119.0 kHz
12275.0		ship stations, ch 1216	SSB QSX 13122.0 kHz
12276.0	**'6XM8'**	**BNDVB Bonn, D**	**ARQ-E 288 Bd: 1155 encrypted tfc to 'C37A' MOSSAD Tel Aviv**
12278.0		ship stations, ch 1217	SSB QSX 13125.0 kHz
12281.0		ship stations, ch 1218	SSB QSX 13128.0 kHz
12284.0		ship stations, ch 1219	SSB QSX 13131.0 kHz
12285.7		**Egyptian E Vienna, AUT**	**SITOR-A: 1235 + 1653 clg + ATU-A tfc to Cairo**
12287.0		ship stations, ch 1220	SSB QSX 13134.0 kHz
12290.0		ship stations, ch 1221 (WORLDWIDE CALLING FREQ.)	SSB QSX 13137.0 kHz
	WORLDWIDE	DISTRESS AND SAFETY FREQ.	SSB
12293.0		ship stations, ch 1222	SSB QSX 13140.0 kHz
12296.0		ship stations, ch 1223	SSB QSX 13143.0 kHz
12299.0		ship stations, ch 1224	SSB QSX 13146.0 kHz
12302.0		ship stations, ch 1225	SSB QSX 13149.0 kHz
12305.0		ship stations, ch 1226	SSB QSX 13152.0 kHz
12308.0		ship stations, ch 1227	SSB QSX 13155.0 kHz
12311.0		ship stations, ch 1228	SSB QSX 13158.0 kHz
12314.0		ship stations, ch 1229	SSB QSX 13161.0 kHz
12317.0		ship stations, ch 1230	SSB QSX 13164.0 kHz
12320.0		ship stations, ch 1231	SSB QSX 13167.0 kHz
12323.0		ship stations, ch 1232	SSB QSX 13170.0 kHz
12326.0		ship stations, ch 1233	SSB QSX 13173.0 kHz
12327.0	**GYU**	**RN Gibraltar, GIB**	**VFT: ARQ-M2 96 Bd: A/B: 1308 encrypted tfc** **VFT: ITA2 75 Bd: 0811 + 1308 encrypted tfc**
12329.0		ship stations, ch 1234	SSB QSX 13176.0 kHz
12332.0		ship stations, ch 1235	SSB QSX 13179.0 kHz
12335.0		ship stations, ch 1236	SSB QSX 13182.0 kHz
12338.0		ship stations, ch 1237	SSB QSX 13185.0 kHz

12341.0		ship stations, ch 1238	SSB	QSX 13188.0 kHz
12344.0		ship stations, ch 1239	SSB	QSX 13191.0 kHz
12347.0		ship stations, ch 1240	SSB	QSX 13194.0 kHz
12350.0		ship stations, ch 1241	SSB	QSX 13197.0 kHz
12353.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB	
12356.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB	
	ZLM	RNZN Auckland, NZL	SSB	
12357.0		UNID teleprinter	125	
12359.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB	
12362.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB	
12365.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB	
	VID	Darwin R, NT, AUS	SSB	
	VIM	Melbourne R, VIC, AUS	SSB	
	VIP	Perth R, WA, AUS	SSB	
	VIS	Sydney R, NSW, AUS	SSB	
	VIT	Townsville R, QLD, AUS	SSB	
12375.5		UNID teleprinter	75	
12395.0		DYNACOM Athens, GRC	SITOR-A: 1240 msg	
12422.0 -		ship stations	CW	
- 12476.5		working frequencies		
12433.0	3BT	Vacoas Meteo, MAU	SSB	
		Agalega Is. Meteo, MAU	SSB	
		Port Mathurin Meteo, ROD	SSB	
		Saint Brandon Meteo, MAU	SSB	
12455.0		ship stations	QSX 12877.5/12973.0 kHz (UIW)	
12469.7		MFA Cairo, EGY	SITOR-A: 0618 + 1640 tfc	
12477.0		ship stations, channel 1	QSX 12579.5 kHz	
12477.5		ship stations, channel 2	QSX 12580.0 kHz	
12478.0		ship stations, channel 3	QSX 12580.5 kHz	
12478.5		ship stations, channel 4	QSX 12581.0 kHz	
12479.0		ship stations, channel 5	QSX 12581.5 kHz	
12479.5		ship stations, channel 6	QSX 12582.0 kHz	
12480.0		ship stations, channel 7	QSX 12582.5 kHz	
12480.5		ship stations, channel 8	QSX 12583.0 kHz	
12481.0		ship stations, channel 9	QSX 12583.5 kHz	
12481.5		ship stations, channel 10	QSX 12584.0 kHz	
12482.0		ship stations, channel 11	QSX 12584.5 kHz	
12482.5		ship stations, channel 12	QSX 12585.0 kHz	
12483.0		ship stations, channel 13	QSX 12585.5 kHz	
12483.5		ship stations, channel 14	QSX 12586.0 kHz	
12484.0		ship stations, channel 15	QSX 12586.5 kHz	
12484.5		ship stations, channel 16	QSX 12587.0 kHz	
12485.0		ship stations, channel 17	QSX 12587.5 kHz	
12485.5		ship stations, channel 18	QSX 12588.0 kHz	
12486.0		ship stations, channel 19	QSX 12588.5 kHz	
12486.5		ship stations, channel 20	QSX 12589.0 kHz	
12487.0		ship stations, channel 21	QSX 12589.5 kHz	
12487.5		ship stations, channel 22	QSX 12590.0 kHz	
12488.0		ship stations, channel 23	QSX 12590.5 kHz	
12488.5		ship stations, channel 24	QSX 12591.0 kHz	
12489.0		ship stations, channel 25	QSX 12591.5 kHz	
12489.5		ship stations, channel 26	QSX 12592.0 kHz	
12490.0		ship stations, channel 27	QSX 12592.5 kHz	
12490.5		ship stations, channel 28	QSX 12593.0 kHz	
12491.0		ship stations, channel 29	QSX 12593.5 kHz	
12491.5		ship stations, channel 30	QSX 12594.0 kHz	
12492.0		ship stations, channel 31	QSX 12594.5 kHz	
12492.5		ship stations, channel 32	QSX 12595.0 kHz	
12493.0		ship stations, channel 33	QSX 12595.5 kHz	
12493.5		ship stations, channel 34	QSX 12596.0 kHz	

12494.0		ship stations, channel 35	QSX 12596.5 kHz
12494.5		ship stations, channel 36	QSX 12597.0 kHz
12495.0		ship stations, channel 37	QSX 12597.5 kHz
12495.5		ship stations, channel 38	QSX 12598.0 kHz
12496.0		ship stations, channel 39	QSX 12598.5 kHz
12496.5		ship stations, channel 40	QSX 12599.0 kHz
12497.0		ship stations, channel 41	QSX 12599.5 kHz
12497.5		ship stations, channel 42	QSX 12600.0 kHz
12498.0		ship stations, channel 43	QSX 12600.5 kHz
12498.5		ship stations, channel 44	QSX 12601.0 kHz
12499.0		ship stations, channel 45	QSX 12601.5 kHz
12499.5		ship stations, channel 46	QSX 12602.0 kHz
12500.0		ship stations, channel 47	QSX 12602.5 kHz
12500.5		ship stations, channel 48	QSX 12603.0 kHz
12501.0		ship stations, channel 49	QSX 12603.5 kHz
12501.5		ship stations, channel 50	QSX 12604.0 kHz
12502.0		ship stations, channel 51	QSX 12604.5 kHz
12502.5		ship stations, channel 52	QSX 12605.0 kHz
12503.0		ship stations, channel 53	QSX 12605.5 kHz
12503.5		ship stations, channel 54	QSX 12606.0 kHz
12504.0		ship stations, channel 55	QSX 12606.5 kHz
12504.5		ship stations, channel 56	QSX 12607.0 kHz
12505.0		ship stations, channel 57	QSX 12607.5 kHz
12505.5		ship stations, channel 58	QSX 12608.0 kHz
12506.0		ship stations, channel 59	QSX 12608.5 kHz
12506.5		ship stations, channel 60	QSX 12609.0 kHz
12507.0		ship stations, channel 61	QSX 12609.5 kHz
12507.5		ship stations, channel 62	QSX 12610.0 kHz
12508.0		ship stations, channel 63	QSX 12610.5 kHz
12508.5		ship stations, channel 64	QSX 12611.0 kHz
12509.0		ship stations, channel 65	QSX 12611.5 kHz
12509.5		ship stations, channel 66	QSX 12612.0 kHz
12510.0		ship stations, channel 67	QSX 12612.5 kHz
12510.5		ship stations, channel 68	QSX 12613.0 kHz
12511.0		ship stations, channel 69	QSX 12613.5 kHz
12511.5		ship stations, channel 70	QSX 12614.0 kHz
12512.0		ship stations, channel 71	QSX 12614.5 kHz
12512.5		ship stations, channel 72	QSX 12615.0 kHz
12513.0		ship stations, channel 73	QSX 12615.5 kHz
12513.5		ship stations, channel 74	QSX 12616.0 kHz
12514.0		ship stations, channel 75	QSX 12616.5 kHz
12514.5		ship stations, channel 76	QSX 12617.0 kHz
12515.0		ship stations, channel 77	QSX 12617.5 kHz
12515.5		ship stations, channel 78	QSX 12618.0 kHz
12516.0		ship stations, channel 79	QSX 12618.5 kHz
12516.5		ship stations, channel 80	QSX 12619.0 kHz
12517.0		ship stations, channel 81	QSX 12619.5 kHz
12517.5		ship stations, channel 82	QSX 12620.0 kHz
12518.0		ship stations, channel 83	QSX 12620.5 kHz
12518.5		ship stations, channel 84	QSX 12621.0 kHz
12519.0		ship stations, channel 85	QSX 12621.5 kHz
12519.5		ship stations, channel 86	QSX 12622.0 kHz
12520.0	WORLDWIDE	NBDPT DISTR. AND SAFETY F.	
12520.5		ship stations, channel 88	QSX 12622.5 kHz
12521.0		ship stations, channel 89	QSX 12623.0 kHz
	'RBSLV'	IN Vishakhapatnam, IND	ITA2 50 Bd: 0355 + 1118 + 1358 + 1426 ry
12521.5		ship stations, channel 90	QSX 12623.5 kHz
12522.0		ship stations, channel 91	QSX 12624.0 kHz
12522.5		ship stations, channel 92	QSX 12624.5 kHz

12523.0	**ship stations, channel 93**	**QSX 12625.0 kHz**
12523.5	**ship stations, channel 94**	**QSX 12625.5 kHz**
12524.0	**ship stations, channel 95**	**QSX 12626.0 kHz**
12524.5	**ship stations, channel 96**	**QSX 12626.5 kHz**
12525.0	**ship stations, channel 97**	**QSX 12627.0 kHz**
12525.5	**ship stations, channel 98**	**QSX 12627.5 kHz**
12526.0	**ship stations, channel 99**	**QSX 12628.0 kHz**
12526.5	**ship stations, channel 100**	**QSX 12628.5 kHz**
12527.0	**ship stations, channel 101**	**QSX 12629.0 kHz**
12527.5	**ship stations, channel 102**	**QSX 12629.5 kHz**
12528.0	**ship stations, channel 103**	**QSX 12630.0 kHz**
12528.5	**ship stations, channel 104**	**QSX 12630.5 kHz**
12529.0	**ship stations, channel 105**	**QSX 12631.0 kHz**
12529.5	**ship stations, channel 106**	**QSX 12631.5 kHz**
12530.0	**ship stations, channel 107**	**QSX 12632.0 kHz**
12530.5	**ship stations, channel 108**	**QSX 12632.5 kHz**
12531.0	**ship stations, channel 109**	**QSX 12633.0 kHz**
12531.5	**ship stations, channel 110**	**QSX 12633.5 kHz**
12532.0	**ship stations, channel 111**	**QSX 12634.0 kHz**
12532.5	**ship stations, channel 112**	**QSX 12634.5 kHz**
12533.0	**ship stations, channel 113**	**QSX 12635.0 kHz**
12533.5	**ship stations, channel 114**	**QSX 12635.5 kHz**
12534.0	**ship stations, channel 115**	**QSX 12636.0 kHz**
12534.5	**ship stations, channel 116**	**QSX 12636.5 kHz**
12535.0	**ship stations, channel 117**	**QSX 12637.0 kHz**
12535.5	**ship stations, channel 118**	**QSX 12637.5 kHz**
12536.0	**ship stations, channel 119**	**QSX 12638.0 kHz**
12536.5	**ship stations, channel 120**	**QSX 12638.5 kHz**
12537.0	**ship stations, channel 121**	**QSX 12639.0 kHz**
12537.5	**ship stations, channel 122**	**QSX 12639.5 kHz**
12538.0	**ship stations, channel 123**	**QSX 12640.0 kHz**
12538.5	**ship stations, channel 124**	**QSX 12640.5 kHz**
12539.0	**ship stations, channel 125**	**QSX 12641.0 kHz**
12539.5	**ship stations, channel 126**	**QSX 12641.5 kHz**
12540.0	**ship stations, channel 127**	**QSX 12642.0 kHz**
12540.5	**ship stations, channel 128**	**QSX 12642.5 kHz**
12541.0	**ship stations, channel 129**	**QSX 12643.0 kHz**
12541.5	**ship stations, channel 130**	**QSX 12643.5 kHz**
12542.0	**ship stations, channel 131**	**QSX 12644.0 kHz**
12542.5	**ship stations, channel 132**	**QSX 12644.5 kHz**
12543.0	**ship stations, channel 133**	**QSX 12645.0 kHz**
12543.5	**ship stations, channel 134**	**QSX 12645.5 kHz**
12544.0	**ship stations, channel 135**	**QSX 12646.0 kHz**
12544.5	**ship stations, channel 136**	**QSX 12646.5 kHz**
12545.0	**ship stations, channel 137**	**QSX 12647.0 kHz**
12545.5	**ship stations, channel 138**	**QSX 12647.5 kHz**
12546.0	**ship stations, channel 139**	**QSX 12648.0 kHz**
12546.5	**ship stations, channel 140**	**QSX 12648.5 kHz**
12546.7	**MFA Cairo, EGY**	**SITOR-A: 1622 ATU-A msg**
12547.0	**ship stations, channel 141**	**QSX 12649.0 kHz**
12547.5	**ship stations, channel 142**	**QSX 12649.5 kHz**
12548.0	**ship stations, channel 143**	**QSX 12650.0 kHz**
12548.5	**ship stations, channel 144**	**QSX 12650.5 kHz**
12549.0	**ship stations, channel 145**	**QSX 12651.0 kHz**
12549.5	**ship stations, channel 146**	**QSX 12651.5 kHz**
12550.0	ship stations calling, ch 1	CW group I
12550.5	ship stations calling, ch 2	CW group I
12551.0	ship stations calling, ch 5	CW group II
12551.5	ship stations calling, ch 6	CW group II
12552.0	ship stations calling, ch 3	CW common channel

12552.5		ship stations calling, ch 7	CW group III
12553.0		ship stations calling, ch 8	CW group III
12553.5		ship stations calling, ch 4	CW common channel
12554.0		ship stations calling, ch 9	CW group IV
12554.5		ship stations calling, ch 10	CW group IV
12555.0		ship stations, channel 147	QSX 12652.0 kHz
12555.5		ship stations, channel 148	QSX 12652.5 kHz
12556.0		ship stations, channel 149	QSX 12653.0 kHz
12556.5		ship stations, channel 150	QSX 12653.5 kHz
12557.0		ship stations, channel 151	QSX 12654.0 kHz
12557.5		ship stations, channel 152	QSX 12654.5 kHz
12558.0		ship stations, channel 153	QSX 12655.0 kHz
12558.5		ship stations, channel 154	QSX 12655.5 kHz
12559.0		ship stations, channel 155	QSX 12656.0 kHz
12559.5		ship stations, channel 156	QSX 12656.5 kHz
12560.0		ship stations, channel 1	non-paired
12560.5		ship stations, channel 2	non-paired
12561.0		ship stations, channel 3	non-paired
12561.5		ship stations, channel 4	non-paired
12562.0		ship stations, channel 5	non-paired
12562.5		ship stations, channel 6	non-paired
12563.0		ship stations, channel 7	non-paired
12563.5		ship stations, channel 8	non-paired
		ship stations	QSX 12818.0 kHz (SAB 63)
12564.0		ship stations, channel 9	non-paired
12564.5		ship stations, channel 10	non-paired
12565.0		ship stations, channel 11	non-paired
12565.5		ship stations, channel 12	non-paired
12566.0		ship stations, channel 13	non-paired
12566.5		ship stations, channel 14	non-paired
12567.0		ship stations, channel 15	non-paired
12567.5		ship stations, channel 16	non-paired
12568.0		ship stations, channel 17	non-paired
12568.5		ship stations, channel 18	non-paired
12569.0		ship stations, channel 19	non-paired
12569.5		ship stations, channel 20	non-paired
12570.0		ship stations, channel 21	non-paired
12570.5		ship stations, channel 22	non-paired
12571.0		ship stations, channel 23	non-paired
12571.5		ship stations, channel 24	non-paired
12572.0		ship stations, channel 25	non-paired
12572.5		ship stations, channel 26	non-paired
12573.0		ship stations, channel 27	non-paired
12573.5		ship stations, channel 28	non-paired
12574.0		ship stations, channel 29	non-paired
12574.5		ship stations, channel 30	non-paired
12575.0		ship stations, channel 31	non-paired
12575.5		ship stations, channel 32	non-paired
12576.0		ship stations, channel 33	non-paired
12576.5		ship stations, channel 34	non-paired
12577.0	WORLDWIDE	DSC DISTRESS AND SAFETY F.	
12577.5	WORLDWIDE	SHIP STATIONS DSC FREQUENCY	QSX 12657.0 kHz
12578.0	WORLDWIDE	SHIP STATIONS DSC FREQUENCY	
12578.5	WORLDWIDE	SHIP STATIONS DSC FREQUENCY	
12579.0	WORLDWIDE	NBDPT MSI FREQUENCY	
	NMF	USCG Boston, MA, USA	SITOR-B: 0030 ice report, 0140 wx, 1218 ice report, 1630 wx

12579.0	NMO	USCG Honolulu, HWA	SITOR-B: 0130 wx, 0330 navigational warnings, 0430 + 0730 + 1330 wx, 1730 navigational warnings, 2030 wx
	NRV	USCG Apra Harbour, GUM	SITOR-B: 0000 + 0200 + 0400 + 0500 + 0900 + 1100 + 1400 + 2300 wx
12579.5		coast stations, channel 1	QSX 12477.0 kHz
	JFA	*Funabashi F R, J*	*scheduled*
	KFS	San Francisco R, CA, USA	SITOR-A: 0006 tts
	YLQ	Riga R, LVA	SITOR-A: 24 h R tts wtsca SITOR-B: 1430 R tts wtsca CW
	9VG 80	Singapore R, SNG	SITOR-A: 24 h tts SITOR-B: 0030 wx, 0130 + 0330 + 0530 + 0730 + 0930 + 1130 tfc list, 1230 wx, 1330 + 1530 + 1730 + 1930 + 2130 + 2330 tfc list CW
12580.0		coast stations, channel 2	QSX 12477.5 kHz
	GKE 5	Portishead R, G	SITOR-A: 24 h tts SITOR-B: 1100 tfc list CW
	PKX	*Jakarta R, INS*	*scheduled*
	WNU	*Slidell R, LA, USA*	*scheduled*
	ZLA	Awanui R, NZL	SITOR-A: 0027 + 0356 + 0630 tts CW
12580.5		coast stations, channel 3	QSX 12478.0 kHz
	KFS	San Francisco R, CA, USA	SITOR-A: 24 h tts SITOR-B: 0930 + 1630 tfc list, 2130 tfc list, 2300 wx CW
	SPA 61	*Gdynia R, POL*	*scheduled*
	XSV	*Tianjin R, CHN*	*scheduled*
12581.0		coast stations, channel 4	QSX 12478.5 kHz
	LSD 836	Buenos Aires R, ARG	SITOR-A: 1841 + 2031 + 2036 + 2100 tts CW
	ZLA	*Awanui R, NZL*	*scheduled*
12581.5		coast stations, channel 5	QSX 12479.0 kHz
	CNP	*Casablanca R, MRC*	*scheduled*
	D4A	*Mindelo R, S. Vicente, CPV*	*scheduled*
	EAD	Madrid R, E	SITOR-B: 0100 + 0300 + 0500 + 0700 + 0900 + 1100 + 1300 + 1500 + 1700 + 1900 + 2100 + 2300 tfc list
	SPB 61	*Szczecin R, POL*	*scheduled*
	VWB	*Mumbai R, IND*	*scheduled*
	WLO	Mobile R, AL, USA	SITOR-A: 0220-1932 tts CW
12582.0		coast stations, channel 6	QSX 12479.5 kHz
	SAB 606	Goeteborg R, S	SITOR-A: 24 h tts
	VIP 34	Perth R, WA, AUS	SITOR-A: 0645-0111 tts CW
	WSC	*Tuckerton R, NJ, USA*	*scheduled*
	7TK 26	*Boufarik R, ALG*	*scheduled*
	9GX	*Tema R, GHA*	*scheduled*

12582.5		coast stations, channel 7	QSX 12480.0 kHz
	FFT 61	Saint Lys R, F	SITOR-A: 24 h tts SITOR-B: 0000+0100+0600+0800 tfc list or wx, 0900 navigational warnings, 1000+1200+1400+1500+1600+1700 tfc list or wx, 1800 navigational warnings, 2000+2100 tfc list or wx CW
	JFA	*Funabashi F R, J*	*scheduled*
	WAH	*Saint Thomas R, VIR*	*scheduled*
	XSG	*Shanghai R, CHN*	*scheduled*
12583.0		coast stations, channel 8	QSX 12480.5 kHz
	HPP	Panama R, PNR	SITOR-A: 24 h tts
12583.5		coast stations, channel 9	QSX 12481.0 kHz
	CBV	Valparaiso R, CHL	SITOR-A: 2028+2036+2238 tts CW
	UUI	Odessa R, UKR	SITOR-A: 0221-1948 R tts wtsca CW
	9MG 16	*Georgetown R, Pin. I., MLA*	*scheduled*
12584.0		coast stations, channel 10	QSX 12481.5 kHz
	D4A	*Mindelo R, S. Vicente, CPV*	*scheduled*
	HZG	*Dammam R, ARS*	*scheduled*
	OXZ	*Lyngby R, DNK*	*scheduled*
	VIP 76	Perth R, WA, AUS	SITOR-A: 24 h tts CW
	ZHH	*Jamestown R, SHN*	*scheduled*
12584.5		coast stations, channel 11	QSX 12482.0 kHz
	CBV	*Valparaiso R, CHL*	*scheduled*
	PKB	*Belawan R, INS*	*scheduled*
	PKF	*Ujung Pandang R, INS*	*scheduled*
	UFC	*Nakhodka R, SE, RUS*	*scheduled*
	USU	Mariupol R, UKR	SITOR-A: 0855-1514 R tts wtsca CW
	WLO	Mobile R, AL, USA	SITOR-A: 0135-2047 tts CW
	XSQ	*Guangzhou R, CHN*	*scheduled*
	3AC 23	*Monte Carlo R, MCO*	*scheduled*
12585.0		coast stations, channel 12	QSX 12482.5 kHz
	NMC	USCG San Francisco, CA, USA	SITOR-A: 1210 tts CW
	PCH 55	Scheveningen R, NLD	SITOR-A: 24 h tts CW
12585.5		coast stations, channel 13	QSX 12483.0 kHz
	KPH	San Francisco R, CA, USA	SITOR-A: 24 h tts SITOR-B: 0100+0300 tfc list; 0500 tfc list, wx; 0700+0900+1100+1300+1500+1700 tfc list; 1900 tfc list, wx; 2100+2300 tfc list CW
	VRX	Victoria Harbour R, HKG	SITOR-A: 24 h tts SITOR-B: 1600 tfc list CW
	WCC	*Chatham R, MA, USA*	*scheduled*
12586.0		coast stations, channel 14	QSX 12483.5 kHz
	FFT 62	*Saint Lys R, F*	*scheduled*
	KPH	*San Francisco R, CA, USA*	*scheduled*
	LSD 836	*Buenos Aires R, ARG*	*scheduled*

12586.0	*WCC*	*Chatham R, MA, USA*	*scheduled*
12586.5		coast stations, channel 15	QSX 12484.0 kHz
	DAN	Norddeich R, D	SITOR-A: 0222-2040 tts CW
	VWM	*Madras R, IND*	*scheduled*
	WLO	Mobile R, AL, USA	SITOR-A: 2042-0918 tts
12587.0		coast stations, channel 16	QSX 12484.5 kHz
	LZW 54	Varna R, BUL	SITOR-A: 0557-2310 tts CW
	UTQ	*Kiyev R, UKR*	*scheduled*
12587.5		coast stations, channel 17	QSX 12485.0 kHz
	SVS 5	*Athens R, GRC*	*scheduled*
12588.0		coast stations, channel 18	QSX 12485.5 kHz
	HEC 13	Berne R, SUI	SITOR-A: 24 h tts CW
	HPP	*Panama R, PNR*	*scheduled*
	LSD 836	*Buenos Aires R, ARG*	*scheduled*
	UFZ	Vladivostok R, SE, RUS	ITA2 50 Bd: 2211-1037 ry or R tts wtsca
	9MG 16	*Georgetown R, Pin. I., MLA*	*scheduled*
12588.5		coast stations, channel 19	QSX 12486.0 kHz
	KFS	*San Francisco R, CA, USA*	*scheduled*
	VCT	*Tors Cove R, NFLD, CAN*	*scheduled*
	WNU	*Slidell R, LA, USA*	*scheduled*
12589.0		coast stations, channel 20	QSX 12486.5 kHz
	LGJ 3	*Rogaland R, NOR*	*scheduled*
	NMO	USCG Honolulu, HWA	SITOR-A: 0147+0505-0827+1346+1956 tts CW
12589.5		coast stations, channel 21	QSX 12487.0 kHz
	KPH	San Francisco R, CA, USA	SITOR-A: 1401+2131 tts
	WCC	*Chatham R, MA, USA*	*scheduled*
12590.0		coast stations, channel 22	QSX 12487.5 kHz
	EAD	Madrid R, E	SITOR-A: 24 h tts SITOR-B: 0100+0300+0500+0700+0900+1100+1300+1500+1700+1900+2100+2300 tfc list CW
	JNA	*JN Tokyo, J*	*scheduled*
	KPH	San Francisco R, CA, USA	SITOR-A: 0005+0932+1458+1540+1803 tts
	9VG 94	Singapore R, SNG	SITOR-A: 24 h tts CW
12590.5		coast stations, channel 23	QSX 12488.0 kHz
	KLB	Seattle R, WA, USA	SITOR-A: 0500 tts SITOR-B: 2030 tfc list
	SVT 5	*Athens R, GRC*	*scheduled*
	YLQ	*Riga R, LVA*	*scheduled*
12591.0		coast stations, channel 24	QSX 12488.5 kHz
	A7D	*Doha R, QAT*	*scheduled* CW
	SAB 624	Goeteborg R, S	SITOR-A: 24 h tts
	VRX	Victoria Harbour R, HKG	SITOR-A: 0033-1109 tts CW
12591.5		coast stations, channel 25	QSX 12489.0 kHz
	GKL 5	*Portishead R, G*	*scheduled*
	UFL	Vladivostok R, SE, RUS	SITOR-A: 0100-1109 R tts wtsca
	WLO	Mobile R, AL, USA	SITOR-A: 24 h tts CW

12592.0		coast stations, channel 26	QSX 12489.5 kHz
	CNP	*Casablanca R, MRC*	*scheduled*
	JOS	*Nagasaki R, J*	*scheduled*
	OXZ	Lyngby R, DNK	SITOR-A: 24 h tts SITOR-B: 0130+0330+0530+0730+0930+1130+1330+1530+1730+1930+2130+2330 tfc list CW
	XVS 21	*Ho Chi Minh Ville R, VTN*	*scheduled*
	YLQ	*Riga R, LVA*	*scheduled*
12592.5		coast stations, channel 27	QSX 12490.0 kHz
	NMN	USCG Portsmouth, VA, USA	SITOR-A: 24 h tts CW
	UQB	*Kholmsk R, FE, RUS*	*scheduled*
	USU	*Mariupol R, UKR*	*scheduled*
12593.0		coast stations, channel 28	QSX 12490.5 kHz
	ESA	Tallinn R, EST	SITOR-A: 0718-2041 tts SITOR-B: 1115 R nx wtsca, 1113 R tts wtsca, 1130+1800 tfc list CW
	KFS	San Francisco R, CA, USA	SITOR-A: 1813 tts
12593.5		coast stations, channel 29	QSX 12491.0 kHz
	WLO	Mobile R, AL, USA	SITOR-A: 1405-0915 tts CW
	9VG 81	Singapore R, SNG	SITOR-A: 0359-1347 tts CW
12594.0		coast stations, channel 30	QSX 12491.5 kHz
	IDR 5	IN Rome, I	CW
	LZW 55	*Varna R, BUL*	*scheduled*
	PPR	Rio de Janeiro R, B	SITOR-A: 1707-0853 tts CW
12594.5		coast stations, channel 31	QSX 12492.0 kHz
	A9M	Hamala R, BHR	SITOR-A: 0225-2041 tts CW
	ESA	Tallinn R, EST	SITOR-A: 1002+1015+1153+1940 tts CW
12595.0		coast stations, channel 32	QSX 12492.5 kHz
	CUL	*Lisbon R, POR*	*scheduled*
	JYO	*Aqaba R, JOR*	*scheduled*
12595.5		coast stations, channel 33	QSX 12493.0 kHz
	OFA	*Helsinki R, FIN*	*scheduled*
12596.0		coast stations, channel 34	QSX 12493.5 kHz
	A7D	*Doha R, QAT*	*scheduled*
	WLO	Mobile R, AL, USA	SITOR-A: 24 h tts CW
	3AC 33	*Monte Carlo R, MCO*	*scheduled*
12596.5		coast stations, channel 35	QSX 12494.0 kHz
	PCH 56	Scheveningen R, NLD	SITOR-A: 24 h tts SITOR-B: 0115+0315+0515+0715+0915+1115+1315+1515+1715+1915+2115+2315 tfc list CW
12597.0		coast stations, channel 36	QSX 12494.5 kHz
	CNP	*Casablanca R, MRC*	*scheduled*

12597.0	SPB 62	Szczecin R, POL	SITOR-A: 0226-2200 tts SITOR-B: 0200+0600+0800+1000+1400+1600+1800+2200 tfc list CW
	UBE	*Petropavl.-Km. R, FE, RUS*	*scheduled*
	9VG 95	Singapore R, SNG	SITOR-A: 24 h tts CW
12597.5		coast stations, channel 37	QSX 12495.0 kHz
	IAR	*Rome R, I*	*scheduled*
	UFN	Novorossiysk R, RUS	SITOR-A: 24 h R tts wtsca CW
12598.0		coast stations, channel 38	QSX 12495.5 kHz
	KPH	*San Francisco R, CA, USA*	*scheduled*
	SPA 62	Gdynia R, POL	SITOR-A: 24 h tts SITOR-B: 0615 tfc list CW
	UQB	Kholmsk R, FE, RUS	ITA2 50 Bd: 0825 ry, 2325 R tts wtsca
	WCC	Chatham R, MA, USA	SITOR-A: 24 h tts SITOR-B: 0040+0240 tfc list; 0440 tfc list, wx; 0640+0840+1040 tfc list; 1240 tfc list, wx; 1440 tfc list; 1640 tfc list, wx; 1840+2040+2240 tfc list CW
12598.5		coast stations, channel 39	QSX 12496.0 kHz
	UGH	*Provideniya R, FE, RUS*	*scheduled*
12599.0		coast stations, channel 40	QSX 12496.5 kHz
	EAD	Madrid R, E	SITOR-B: 0100+0300+0500+0700+0900+1100+1300+1500+1700+1900+2100+2300 tfc list
	WLO	Mobile R, AL, USA	SITOR-A: 24 h tts CW
	XSX	*Chi-lung R, TAI*	*scheduled*
12599.5		coast stations, channel 41	QSX 12497.0 kHz
	IAR	*Rome R, I*	*scheduled*
	UAT	Moscow R, RUS	SITOR-A: 24 h R tts wtsca SITOR-B: 1407+1810 tfc list CW
	VAI	CCG Vancouver, BC, CAN	SITOR-B: 0200+0230+0700+0730+1500+1900+1930 wx
12600.0		coast stations, channel 42	QSX 12497.5 kHz
	KPH	San Francisco R, CA, USA	SITOR-A: 0826+2225 tts SITOR-B: 0100+0300 tfc list; 0500 tfc list, wx; 0700+0900+1100+1300+1500+1700 tfc list; 1900 tfc list, wx; 2100+2300 tfc list CW
	YLQ	*Riga R, LVA*	*scheduled*
	7TK 27	*Boufarik R, ALG*	*scheduled*
12600.5		coast stations, channel 43	QSX 12498.0 kHz
	HEC 23	Berne R, SUI	SITOR-A: 0545-2134 tts CW
	VCT	*Tors Cove R, NFLD, CAN*	*scheduled*
	XSQ	*Guangzhou R, CHN*	*scheduled*
12601.0		coast stations, channel 44	QSX 12498.5 kHz
	HKC	*Buenaventura R, CLM*	*scheduled*

12601.0	**ZSC 63**	**Cape Town R, AFS**	**SITOR-A: 0444-2134 tts** **SITOR-B: 0015+0215+0415 tfc list; 0615 tfc list, navigational warnings; 0815 tfc list, 0900 navigational warnings, 0930 wx, 1015+1215+1415+1615 tfc list, 1700 navigational warnings, 1730 wx, 1815+2015+2215 tfc list** CW
12601.5		**coast stations, channel 45**	**QSX 12499.0 kHz**
	OXZ	**Lyngby R, DNK**	**SITOR-A: 24 h tts** **SITOR-B: 0130+0330+0530+0730+0930+1130+1330+1530+1730+1930+2130+2330 tfc list** CW
	9AR	***Rijeka R, HRV***	***scheduled***
12602.0		**coast stations, channel 46**	**QSX 12499.5 kHz**
	UFN	**Novorossiysk R, RUS**	**SITOR-A: 2043 R tts wtsca** CW
	XSG	***Shanghai R, CHN***	***scheduled***
12602.5		**coast stations, channel 47**	**QSX 12500.0 kHz**
	IAR	**Rome R, I**	**SITOR-A: 0549-1936 tts** CW
	KFS	***San Francisco R, CA, USA***	***scheduled***
12603.0		**coast stations, channel 48**	**QSX 12500.5 kHz**
	GKY 5	**Portishead R, G**	**SITOR-A: 24 h tts** CW
12603.5		**coast stations, channel 49**	**QSX 12501.0 kHz**
	SVU 5	**Athens R, GRC**	**SITOR-A: 24 h tts** **SITOR-B: 0620+1620 tfc list** CW
12604.0		**coast stations, channel 50**	**QSX 12501.5 kHz**
12604.5		**coast stations, channel 51**	**QSX 12502.0 kHz**
	IAR	***Rome R, I***	***scheduled***
	WLO	**Mobile R, AL, USA**	**SITOR-A: 24 h tts** CW
	9AR	**Rijeka R, HRV**	**SITOR-A: 0734+2048 tts** CW
12605.0		**coast stations, channel 52**	**QSX 12502.5 kHz**
	CNP	***Casablanca R, MRC***	***scheduled***
	LGJ 4	**Rogaland R, NOR**	**SITOR-A: 24 h tts** CW
	WNU	***Slidell R, LA, USA***	***scheduled***
12605.5		**coast stations, channel 53**	**QSX 12503.0 kHz**
	FFT 64	**Saint Lys R, F**	**SITOR-A: 24 h tts** CW
12606.0		**coast stations, channel 54**	**QSX 12503.5 kHz**
	IAR	***Rome R, I***	***scheduled***
	WLO	**Mobile R, AL, USA**	**SITOR-A: 24 h tts** CW
12606.5		**coast stations, channel 55**	**QSX 12504.0 kHz**
12607.0		**coast stations, channel 56**	**QSX 12504.5 kHz**
	GKQ 5	**Portishead R, G**	**SITOR-A: 24 h tts** CW
12607.5		**coast stations, channel 57**	**QSX 12505.0 kHz**
	VCT	***Tors Cove R, NFLD, CAN***	***scheduled***

12607.5	WNU	Slidell R, LA, USA	SITOR-A: 1340+1410 tts SITOR-B: 1300+1350+1449+1725+2100+2152 tfc list or wx
	9AR	*Rijeka R, HRV*	*scheduled*
12608.0		coast stations, channel 58	QSX 12505.5 kHz
	UAT	Moscow R, RUS	SITOR-A: 0558-1344 R tts wtsca SITOR-B: 1200 tfc list CW
12608.5		coast stations, channel 59	QSX 12506.0 kHz
12609.0		coast stations, channel 60	QSX 12506.5 kHz
	4PB	*Colombo R, SLK*	*scheduled*
12609.5		coast stations, channel 61	QSX 12507.0 kHz
	WLO	Mobile R, AL, USA	SITOR-A: 24 h tts CW
12610.0		coast stations, channel 62	QSX 12507.5 kHz
12610.5		coast stations, channel 63	QSX 12508.0 kHz
	RUF	Sevastopol' R, UKR	CW
	VCT	Tors Cove R, NFLD, CAN	SITOR-A: 24 h tts SITOR-B: 0100 tfc list, 0451 wx, 0700 tfc list, 1051+1651+2251 wx CW
12611.0		coast stations, channel 64	QSX 12508.5 kHz
12611.5		coast stations, channel 65	QSX 12509.0 kHz
	KEJ	Hoolehua R, HWA	SITOR-A: 0156+0346+1730 tts SITOR-B: H+15 tfc list CW
12612.0		coast stations, channel 66	QSX 12509.5 kHz
12612.5		coast stations, channel 67	QSX 12510.0 kHz
12613.0		coast stations, channel 68	QSX 12510.5 kHz
	XSQ	Guangzhou R, CHN	SITOR-A: 0050+1213-1935 tts CW
12613.5		coast stations, channel 69	QSX 12511.0 kHz
12614.0		coast stations, channel 70	QSX 12511.5 kHz
	TAH	*Istanbul R, TUR*	*scheduled*
12614.5		coast stations, channel 71	QSX 12512.0 kHz
	UGC	*Saint Petersburg R, RUS*	*scheduled*
12615.0		coast stations, channel 72	QSX 12512.5 kHz
	USU	Mariupol R, UKR	SITOR-A: 24 h R tts wtsca SITOR-B: 1500 R tts wtsca CW
12615.5		coast stations, channel 73	QSX 12513.0 kHz
12616.0		coast stations, channel 74	QSX 12513.5 kHz
	LZW 56	*Varna R, BUL*	*scheduled*
12616.5		coast stations, channel 75	QSX 12514.0 kHz
12617.0		coast stations, channel 76	QSX 12514.5 kHz
12617.5		coast stations, channel 77	QSX 12515.0 kHz
12618.0		coast stations, channel 78	QSX 12515.5 kHz
12618.5		coast stations, channel 79	QSX 12516.0 kHz
	VCT	*Tors Cove R, NFLD, CAN*	*scheduled*
12619.0		coast stations, channel 80	QSX 12516.5 kHz
	EQN	*Khomeini R, IRN*	*scheduled*
12619.5		coast stations, channel 81	QSX 12517.0 kHz
12620.0		coast stations, channel 82	QSX 12517.5 kHz
12620.5		coast stations, channel 83	QSX 12518.0 kHz
12621.0		coast stations, channel 84	QSX 12518.5 kHz
	TAH	*Istanbul R, TUR*	*scheduled*
12621.5		coast stations, channel 85	QSX 12519.0 kHz
	YLQ	*Riga R, LVA*	*scheduled*
12622.0		coast stations, channel 86	QSX 12519.5 kHz

12622.5		coast stations, channel 88	QSX 12520.5 kHz
12623.0		coast stations, channel 89	QSX 12521.0 kHz
12623.5		coast stations, channel 90	QSX 12521.5 kHz
12624.0		coast stations, channel 91	QSX 12522.0 kHz
	SAB 691	Goeteborg R, S	SITOR-A: 1119 + 1340 + 2146 tts SITOR-B: 0735 + 1335 + 2035 schedule, tfc list
12624.5		coast stations, channel 92	QSX 12522.5 kHz
12625.0		coast stations, channel 93	QSX 12523.0 kHz
12625.5		coast stations, channel 94	QSX 12523.5 kHz
	UCE	Arkhangelsk R, RUS	SITOR-A: 0553 + 0715 + 0730 + 1105 R tts wtsca
12626.0		coast stations, channel 95	QSX 12524.0 kHz
12626.5		coast stations, channel 96	QSX 12524.5 kHz
12627.0		coast stations, channel 97	QSX 12525.0 kHz
12627.5		coast stations, channel 98	QSX 12525.5 kHz
	USU	Mariupol R, UKR	SITOR-A: 0602-1928 R tts wtsca CW
12628.0		coast stations, channel 99	QSX 12526.0 kHz
12628.5		coast stations, channel 100	QSX 12526.5 kHz
12629.0		coast stations, channel 101	QSX 12527.0 kHz
12629.5		coast stations, channel 102	QSX 12527.5 kHz
12630.0		coast stations, channel 103	QSX 12528.0 kHz
12630.5		coast stations, channel 104	QSX 12528.5 kHz
12631.0		coast stations, channel 105	QSX 12529.0 kHz
12631.5		coast stations, channel 106	QSX 12529.5 kHz
12632.0		coast stations, channel 107	QSX 12530.0 kHz
12632.5		coast stations, channel 108	QSX 12530.5 kHz
	UGC	Saint Petersburg R, RUS	SITOR-A: 0602-1700 R tts wtsca SITOR-B: 0700 + 1600 tfc list CW
12633.0		coast stations, channel 109	QSX 12531.0 kHz
12633.5		coast stations, channel 110	QSX 12531.5 kHz
12634.0		coast stations, channel 111	QSX 12532.0 kHz
12634.5		coast stations, channel 112	QSX 12532.5 kHz
12635.0		coast stations, channel 113	QSX 12533.0 kHz
12635.5		coast stations, channel 114	QSX 12533.5 kHz
	LZW 57	*Varna R, BUL*	*scheduled*
12636.0		coast stations, channel 115	QSX 12534.0 kHz
12636.5		coast stations, channel 116	QSX 12534.5 kHz
12637.0		coast stations, channel 117	QSX 12535.0 kHz
12637.5		coast stations, channel 118	QSX 12535.5 kHz
	UHS	Murmansk R, RUS	SITOR-A: 0430-1934 R tts wtsca CW
	XSG	*Shanghai R, CHN*	*scheduled*
12638.0		coast stations, channel 119	QSX 12536.0 kHz
12638.5		coast stations, channel 120	QSX 12536.5 kHz
12639.0		coast stations, channel 121	QSX 12537.0 kHz
12639.5		coast stations, channel 122	QSX 12537.5 kHz
	OST 50	Oostende R, BEL	SITOR-A: 24 h tts CW
	SAB 622	*Goeteborg R, S*	*scheduled*
12640.0		coast stations, channel 123	QSX 12538.0 kHz
	TAH	*Istanbul R, TUR*	*scheduled*
12640.5		coast stations, channel 124	QSX 12538.5 kHz
12641.0		coast stations, channel 125	QSX 12539.0 kHz
12641.5		coast stations, channel 126	QSX 12539.5 kHz
12642.0		coast stations, channel 127	QSX 12540.0 kHz
12642.5		coast stations, channel 128	QSX 12540.5 kHz
	XSG	*Shanghai R, CHN*	*scheduled*

12643.0		**coast stations, channel 129**	**QSX 12541.0 kHz**
12643.5		**coast stations, channel 130**	**QSX 12541.5 kHz**
	YLQ	***Riga R, LVA***	***scheduled***
12644.0		**coast stations, channel 131**	**QSX 12542.0 kHz**
12644.5		**coast stations, channel 132**	**QSX 12542.5 kHz**
12645.0		**coast stations, channel 133**	**QSX 12543.0 kHz**
12645.5		**coast stations, channel 134**	**QSX 12543.5 kHz**
12646.0		**coast stations, channel 135**	**QSX 12544.0 kHz**
	TAH	***Istanbul R, TUR***	***scheduled***
12646.5		**coast stations, channel 136**	**QSX 12544.5 kHz**
12647.0		**coast stations, channel 137**	**QSX 12545.0 kHz**
	LPD	**General Pacheco R, ARG**	**SITOR-A: 2012-0511 tts** **SITOR-B: 1100 + 1900 tfc list** CW
12647.5		**coast stations, channel 138**	**QSX 12545.5 kHz**
12648.0		**coast stations, channel 139**	**QSX 12546.0 kHz**
	LPD	***General Pacheco R, ARG***	***scheduled***
12648.5		**coast stations, channel 140**	**QSX 12546.5 kHz**
	XSQ	***Guangzhou R, CHN***	***scheduled***
12649.0		**coast stations, channel 141**	**QSX 12547.0 kHz**
12649.5		**coast stations, channel 142**	**QSX 12547.5 kHz**
	XSG	**Shanghai R, CHN**	**SITOR-A: 0524-2051 tts** **SITOR-B: 0845 navigational warnings + schedule, 2330 tfc list** CW
12650.0		**coast stations, channel 143**	**QSX 12548.0 kHz**
12650.5		**coast stations, channel 144**	**QSX 12548.5 kHz**
12651.0		**coast stations, channel 145**	**QSX 12549.0 kHz**
12651.5		**coast stations, channel 146**	**QSX 12549.5 kHz**
	YLQ	***Riga R, LVA***	***scheduled***
12652.0		**coast stations, channel 147**	**QSX 12555.0 kHz**
	SAB 647	**Goeteborg R, S**	**SITOR-A: 0555-1807 tts** **SITOR-B: 0730 + 1230 tfc list** CW
12652.5		**coast stations, channel 148**	**QSX 12555.5 kHz**
12653.0		**coast stations, channel 149**	**QSX 12556.0 kHz**
12653.5		**coast stations, channel 150**	**QSX 12556.5 kHz**
12654.0		**coast stations, channel 151**	**QSX 12557.0 kHz**
	TAH	**Istanbul R, TUR**	**SITOR-A: 0614-1717 tts**
12654.5		**coast stations, channel 152**	**QSX 12557.5 kHz**
12655.0		**coast stations, channel 153**	**QSX 12558.0 kHz**
12655.5		**coast stations, channel 154**	**QSX 12558.5 kHz**
12656.0		**coast stations, channel 155**	**QSX 12559.0 kHz**
12656.5		**coast stations, channel 156**	**QSX 12559.5 kHz**
12657.0	**WORLDWIDE**	**COAST STATIONS DSC FREQUENCY**	**QSX 12577.5 kHz**
12657.5	**WORLDWIDE**	**COAST STATIONS DSC FREQUENCY**	
12658.0	**WORLDWIDE**	**COAST STATIONS DSC FREQUENCY**	
12659.0	LZW 5	Varna R, BUL	CW
12659.5	9VG 37	Singapore R, SNG	CW
12660.0	**EBA**	**SN Madrid, E**	**ITA2 75 Bd: 1335 + 1343 ry**
	LZW	Varna R, BUL	CW
	S7Q	Victoria R, Mahe, SEY	CW
	WLO	Mobile R, AL, USA	CW
	YIR	Basrah R, IRQ	CW
	5AB	Benghazi R, LBY	CW
	9PA	Banana R, ZAI	CW
12661.5	**UHS**	**Murmansk R, RUS**	**ITA2 50 Bd: 0816 + 1511 + 1602 R tts wtsca**
	XSG	Shanghai R, CHN	CW
12662.0	XSL	Fuzhou R, CHN	CW

12662.0	7TF 8	Boufarik R, ALG	CW
12663.0	CBV	Valparaiso R, CHL	CW
12664.0	**FUM**	**FN Papeete, Tahiti, OCE**	**ITA2 75 Bd: 0243+0457+0920+1250 ry**
12665.0		**UNID teleprinter**	**200**
12666.5	5BA	Nicosia R, CYP	CW
12667.5	JCX	Naha R, J	CW
12668.6		**UNID teleprinter**	**300**
12670.5	SUZ 5	Serapeum R, EGY	CW
12671.0	VFA	CCG Inuvik, NWT, CAN	CW
	VFF	CCG Iqaluit, NWT, CAN	CW
12671.5	**YLQ**	**Riga R, LVA**	**ITA2 50 Bd: 1008-2015 R tts wtsca** CW
12673.5	CLA 33	Habana R, CUB	CW
	EAF 4	Madrid R, E	CW
	E3C	Assab R, ERI	CW
	JOU	Nagasaki R, J	CW
12674.0	HMZ	Pyongyang R, KRE	CW
	PPL	Belem R, B	CW
12675.0	SAA	Karlskrona R, S	CW
	URM	Odessa R, UKR	CW
	XFB	Ciudad del Carmen R, MEX	CW
	XFK	La Paz R, MEX	CW
12675.5	A4M	Muscat R, OMA	CW
12678.0	FFS 6	Saint Lys R, F	CW
	UQB	Kholmsk R, FE, RUS	CW
	YJM 3	Port-Vila R, Efate I., VUT	CW
	9MG 3	Georgetown R, Pin. I., MLA	CW
12680.0	5AT	Tripoli R, LBY	CW
12681.0		**UNID teleprinter**	**100**
12682.5	PKE	Amboina R, INS	CW
	PKF	Ujung Pandang R, INS	CW
	PKP	Dumai R, INS	CW
	PNK	Jayapura R, INS	CW
	TNA 12	Pointe-Noire R, COG	CW
12684.0	RDL	Smolensk, RUS	CW
12687.0	JCT	Choshi R, J	CW
	OFJ 32	Helsinki R, FIN	CW
	PPR	Rio de Janeiro R, B	CW
12688.5	**YLQ**	**Riga R, LVA**	**ITA2 50 Bd: 0900-2017 R tts wtsca** CW
12689.0	LZL 5	Bourgas R, BUL	CW
	PPL	Belem R, B	CW
12689.5	PPJ	Juncao R, B	CW
12690.0	EQN	Khomeini R, IRN	CW
	PKG	Banjarmasin R, INS	CW
	UIW	Kaliningrad R, RUS	CW
12691.0	EDF 44	Madrid R, E	CW
	FUX	**FN Le Port, REU**	**ITA2 75 Bd: 0526+1305+1458 ry**
12692.0	PPO	Olinda R, B	CW
12693.0	UGC	Saint Petersburg R, RUS	CW
12695.0	OBY	Paita R, PRU	CW
12695.5	CNP	Casablanca R, MRC	CW
	KFS	San Francisco R, CA, USA	CW
	UWS	Kiyev R, UKR	CW
	XSX	Chi-lung R, TAI	CW
	7TF 8	Boufarik R, ALG	CW

12697.0	**USU**	**Mariupol R, UKR**	**ITA2 50 Bd: 0711-1126 R tts wtsca, 1500 R navigational warnings wtsca** CW
12697.8	5RS	Toamasina R, MDG	CW
12698.0	A9M	Hamala R, BHR	CW
	ZSC 9	Cape Town R, AFS	CW
12699.0	HPP	Panama R, PNR	CW
12700.0	D4A	Mindelo R, S. Vicente, CPV	CW
	D4D	Praia R, Santiago, CPV	CW
	EQI	Abbas R, IRN	CW
	EQM	Bushire R, IRN	CW
	UCE	**Arkhangelsk R, RUS**	**ITA2 50 Bd: 1037-1114 R tts wtsca**
	XSQ	Guangzhou R, CHN	CW
	3DP	Suva R, FJI	CW
12702.0	**CKN**	**CF Victoria, BC, CAN**	**ITA2 75 Bd: 1400+2006+2119 msg**
12703.0	LYK	Klaipeda R, LTU	CW
	XFL	Mazatlan R, MEX	CW
12704.5	JFX	Kagoshima F R, J	CW
	LOR	**AN Puerto Belgrano, ARG**	**ITA2 75 Bd: 1405+2145 msgs (5lgs)**
	PKD	Surabaya R, INS	CW
	PKM	Bitung R, INS	CW
	WLO	Mobile R, AL, USA	CW
12705.0	XSR	Haikou R, CHN	CW
12707.0	9VG 34	Singapore R, SNG	CW
12708.0	XFQ	Salina Cruz R, MEX	CW
12709.0	A9M	Hamala R, BHR	CW
	ELC	Monrovia R, LBR	CW
	FJP 23	Noumea R, NCL	CW
	8PO	Bridgetown R, BRB	CW
	8RB	Demerara R, GUY	CW
12709.2	9HD	Valetta R, MLT	CW
12710.0	VWB	Mumbai R, IND	CW
	XSZ	Dalian R, CHN	CW
12711.0	HCG	Guayaquil R, EQA	CW
	USU	Mariupol R, UKR	CW
12712.0	HLW 3	Soul R, KOR	CW
12714.0	CBV	Valparaiso R, CHL	CW
	GKM 5	Portishead R, G	CW
	UCE	**Arkhangelsk R, RUS**	**SITOR-A: 0434-2151 R tts wtsca** **SITOR-B: 0607-2100 ry or tfc list or R tts wtsca or navigational warnings** CW
12715.0	PKN	Balikpapan R, INS	CW
	RPLT	Tuapse R, RUS	CW
	UTQ	Kiyev R, UKR	CW
12718.5	VWM	Madras R, IND	CW
12719.0	PPR	Rio de Janeiro R, B	CW
12719.8	ZLO 5	RNZN Auckland, NZL	CW
12720.0	SVI 5	Athens R, GRC	CW
12721.0	SPH 61	Gdynia R, POL	CW
12722.0	FJY 4	Martin de Vivies R, AMS	CW
12723.0	ESA	Tallinn R, EST	CW
12724.0	ZSC 43	Cape Town R, AFS	CW
	9VG 57	Singapore R, SNG	CW
12725.0	OBC	Callao R, PRU	CW

12727.0	HLJ	Soul R, KOR	CW
12727.5	LGJ	Rogaland R, NOR	CW
	XSL	Fuzhou R, CHN	CW
	XSW	Kao-hsiung R, TAI	CW
12728.0	J2A 9	Jibuti R, DJI	CW
	L2C	ACG Buenos Aires, ARG	CW
	YKM 7	Al Ladhiqiyah R, SYR	CW
12729.0	UFL	Vladivostok R, SE, RUS	CW
	UVA	Gelendhzik R, RUS	CW
	XFN	Progreso R, MEX	CW
12730.0	*NMC*	*USCG San Franc., CA, USA*	*FAX // 4346.0 kHz $*
	UHS	Murmansk R, RUS	CW
	VTN	IN Cochin, IND	CW
12732.0	USU	Mariupol R, UKR	CW
12733.0	PPJ	Juncao R, B	CW
12733.5	9VG 20	Singapore R, SNG	CW
12734.0	XSP	Shantou R, CHN	CW
12735.0	**URL**	**Sevastopol' R, UKR**	**ITA2 50 Bd: 0800+1422+1846 R tts wtsca**
			CW
12736.5	TAH	Istanbul R, TUR	CW
12738.0	PPR	Rio de Janeiro R, B	CW
12739.0	**UAT**	**Moscow R, RUS**	**SITOR-A: 0807-1950 R tts wtsca**
			CW
12740.0	XDA	Mexico City R, MEX	CW
	XSD	Yingkou R, CHN	CW
		RN Preston, G	**ITA2 100 Bd: 0956-2054 encrypted tfc**
12741.0	**MTI**	**RN Plymouth, G**	**ITA2 75 Bd: 0958+1419+2235 channel status**
12742.0	PPL	Belem R, B	CW
12745.5	*JJC*	*KYODO Tokyo, J*	*FAX // 4316.0 kHz $*
	VWC	Calcutta R, IND	CW
12747.5	CBV	Valparaiso R, CHL	CW
12748.0	CLA 30	Habana R, CUB	CW
	IRM	CIRM Rome, I	CW
12750.0	CWA	Cerrito R, URG	CW
	NMF	*USCG Boston, MA, USA*	*FAX // 6340.5 kHz $*
	VHI 5	RAN Darwin, NT, AUS	CW
12752.0	C6N	Nassau R, BAH	CW
	XFA	Acapulco R, MEX	CW
12752.5	HZG	Dammam R, ARS	CW
12753.0	*CKN*	*CF Victoria, BC, CAN*	*FAX // 2754.0 kHz $*
12753.5	OXZ 62	Lyngby R, DNK	CW
12755.0	ESA	Tallinn R, EST	CW
12760.0	IRM	CIRM Rome, I	CW
	UUI	Odessa R, UKR	CW
12763.5	LPD 76	General Pacheco R, ARG	CW
12765.0	UCW	Saint Petersburg R, RUS	CW
12766.0	PPO	Olinda R, B	CW
12768.0	CBV	Valparaiso R, CHL	CW
12770.0		**UNID teleprinter**	**100**
12771.0	7TF 8	Boufarik R, ALG	CW
12772.3		**UNID teleprinter**	**75**
12772.5	ZSC 38	Cape Town R, AFS	CW
		UNID teleprinter	**75**
12775.0	XFU	Veracruz R, MEX	CW
12776.0	PPJ	Juncao R, B	CW
12777.0	*NDT*	*USN Totsuka, J*	*FAX // 10253.0 kHz $*
12780.0	D3E 61	Luanda R, AGL	CW

12780.5	9AR	Rijeka R, HRV	CW
12781.5	9MB 5	MN Georgetown, P.I., MLA	CW
12785.0	XSX	Chi-lung R, TAI	CW
12786.0	DZW	Manila R, PHL	CW
		UNID teleprinter	**75**
12788.5	GKD 5	Portishead R, G	CW
12790.0	GKG 5	Portishead R, G	CW
	NMG	*USCG N. Orleans, LA, USA*	*FAX // 4316.0 kHz $*
	XST	Qingdao R, CHN	CW
12791.5	GKH 5	Portishead R, G	CW
12792.0	CLA 31	Habana R, CUB	CW
	HZG	Dammam R, ARS	CW
12795.0	OBQ	Iquitos R, PRU	CW
	PWZ	BN Rio de Janeiro, B	CW
	UCE	**Arkhangelsk R, RUS**	**ITA2 50 Bd: 0804+1345+1553 R tts wtsca** CW
12797.0	**UHS**	**Murmansk R, RUS**	**ITA2 50 Bd: 1555+1924 R tts wtsca** CW
12799.5	PCH 51	Scheveningen R, NLD	CW
	XSZ	Dalian R, CHN	CW
12800.0	HSA 3	Bangkok R, THA	CW
12804.0	DZE	Mandaluyong R, PHL	CW
	NKW	USN Diego Garcia, DGA	COMB
	XSI	Sanya R, CHN	CW
	YQI 5	Constanta R, ROU	CW
12805.0	PPR	Rio de Janeiro R, B	CW
12806.0	*NKW*	*USN Diego Garcia, DGA*	*FAX // 5262.0 kHz $*
12808.5	KPH	San Francisco R, CA, USA	CW
	VTG 7	IN Mumbai, IND	CW
12810.0	UJE	Moscow R, RUS	CW
12813.0	ZPK	Asuncion R, PRG	CW
12815.0	GKF 5	Portishead R, G	CW
	LYL	**Klaipeda R, LTU**	**ITA2 50 Bd: 1019 R tts wtsca** CW
	OBF	Mollendo R, PRU	CW
	XFY	Guaymas R, MEX	CW
12816.0	DZA	Mandaluyong R, PHL	CW
12817.0	S9M	Sao Tome R, STP	CW
12817.5	RSGV	Petrozavodsk R, RUS	CW
	XSU	Yantai R, CHN	CW
	YVG	La Guaira R, VEN	CW
12818.0	**SAB 63**	**Goeteborg R, S**	**SITOR-A: 24 h tts; QSX 12563.5 kHz** **SITOR-B: 0500+1700 Swedish nx**
12820.0	XVG 10	Hai Phong R, VTN	CW
12821.5	DZF	Bacoor R, PHL	CW
12822.0	GKA 5	Portishead R, G	CW
	XSV	Tianjin R, CHN	CW
12823.5	CTP	NATO Lisbon, POR	CW
12824.0	**GYU**	**RN Gibraltar, GIB**	**ITA2 75 Bd: 0607-2055 channel status**
	XFC	Cozumel R, MEX	CW
12825.0	UFH	Petropavl.-Km. R, FE, RUS	CW
12826.5	CBV	Valparaiso R, CHL	CW
	JCS	Choshi R, J	CW
	SPH 62	Gdynia R, POL	CW
	WNU	Slidell R, LA, USA	CW

12828.0	CLA 81	Habana R, CUB	CW
	DZF	Bacoor R, PHL	CW
12829.5	XFM	Manzanillo R, MEX	CW
12831.0	3BM 5	Port Louis R, MAU	CW
	9MG 3	Georgetown R, Pin. I., MLA	CW
12832.0	RDL	Smolensk, RUS	CW
12832.5	JF.	many F R stations, J	CW
12833.0	SVA 5	Athens R, GRC	CW
12833.5	DZP	Novaliches R, PHL	CW
12835.0	URK	Kerch R, UKR	CW
12835.4	GKB 5	Portishead R, G	CW
12835.5	**UFH**	**Petropavl.-Km. R, FE, RUS**	**ITA2 50 Bd: 0720 R tts wtsca**
12836.0	XDA	Mexico City R, MEX	CW
12838.0	CLA 82	Habana R, CUB	CW
12840.0	JMC 5	Tokyo Meteo, J	CW
	LZW 52	Varna R, BUL	CW
	PPJ	Juncao R, B	CW
	PPO	Olinda R, B	CW
	VTP 7	IN Vishakhapatnam, IND	CW
	YLQ	Riga R, LVA	CW
12840.5	**PBC 312**	**DN Goeree Island, NLD**	**ITA2 75 Bd: 24 h ry**
12843.0	HLO	Soul R, KOR	CW
	XFP	Chetumal R, MEX	CW
12844.5	KFS	San Francisco R, CA, USA	CW
	UON	Baku R, AZE	CW
12847.0	WCC	Chatham R, MA, USA	CW
12849.0	VTF 5	IN Mumbai, IND	CW
12853.5	HKC	Buenaventura R, CLM	CW
12855.0	UBF	Saint Petersburg R, RUS	CW
	XDA	Mexico City R, MEX	CW
12855.8	4WD	Al Hudaydah R, YEM	CW
12856.0	CBV	Valparaiso R, CHL	CW
	XSG	Shanghai R, CHN	CW
12857.0	**6WW**	**FN Dakar, SEN**	**ITA2 75 Bd: 0558-2056 ry**
12858.0	GKI 5	Portishead R, G	CW
	JF.	many F R stations, J	CW
12859.0	SVD 5	Athens R, GRC	CW
12860.8	5RS	Toamasina R, MDG	CW
12864.0	A3A	Nuku'alofa R, TON	CW
	DZZ	Manila R, PHL	CW
	XSW	Kao-hsiung R, TAI	CW
12865.0	UPW	Liepaja R, LVA	CW
12867.0	XYR 8	Yangon R, MYA	CW
12869.0	WNU	Slidell R, LA, USA	CW
12870.0	DZO	Bulacan R, PHL	CW
	EQJ	Chah Bahar R, IRN	CW
	LZS 32	BN Sofia, BUL	CW
	UFZ	Vladivostok R, SE, RUS	CW
12871.5	GKJ 5	Portishead R, G	CW
	KUQ	Pago Pago R, SMA	CW
	XSG	Shanghai R, CHN	CW
12872.0	SPE 62	Szczecin R, POL	CW
12876.0	URL	Sevastopol' R, UKR	CW
	VAI	CCG Vancouver, BC, CAN	CW
	XSM	Xiamen R, CHN	CW
12877.0	XSQ	Guangzhou R, CHN	CW
12877.5	UIW	Kaliningrad R, RUS	CW
12878.0	JCU	Choshi R, J	CW
12879.5	WSC	Tuckerton R, NJ, USA	CW
12883.5		UNID teleprinter	100

12885.0	9YL	North Post R, TRD	CW
12886.5	WLO	Mobile R, AL, USA	SITOR-B: H+35 tfc list, wx CW
12887.5	EAD 44	Madrid R, E	CW
12888.8	DZK	Bulacan R, PHL	CW
12889.5	XSE	Qinhuangdao R, CHN	CW
12890.0	XSJ	Zhanjiang R, CHN	CW
12891.0	UFN	Novorossiysk R, RUS	ITA2 50 Bd: 1137-1849 R ry or tts wtsca CW
12895.0	LYK	Klaipeda R, LTU	ITA2 50 Bd: 0800 R navigational warnings wtsca, 1518+1531 R tts wtsca, 1917 s. on with R tts wtsca CW
	YLQ	Riga R, LVA	CW
	9KK 8	Safat R, KWT	CW
12898.0	XSG	Shanghai R, CHN	CW
12898.5	CBV	Valparaiso R, CHL	CW
12899.0	LYL	Klaipeda R, LTU	CW
12900.0	PWZ	BN Rio de Janeiro, B	CW
12901.0	L2E	ACG Buenos Aires, ARG	CW
12901.5	UGC	Saint Petersburg R, RUS	ITA2 50 Bd: 0708-1604 ry or R tts wtsca
12903.0	ZPK	Asuncion R, PRG	CW
	'RBSL'	IN Mumbai, IND	ITA2 50 Bd: 24 h ry or msgs (4fgs) or wx
12905.9	GYA	RN London, G	ITA2 75 Bd: 1324 channel status
12906.0	DZJ	Bulacan R, PHL	CW
12907.5	VIX 5	RAN Canberra, ACT, AUS	CW
	9AR	Rijeka R, HRV	CW
12910.0	UAT	Moscow R, RUS	CW
12912.0	XSH	Basuo R, CHN	CW
12912.6	FFL 6	Saint Lys R, F	CW
12916.5	HLF	Soul R, KOR	CW
	OXZ 6	Lyngby R, DNK	CW
12917.0	KLB	Seattle R, WA, USA	CW
12920.0	BJZ 24	Wuhan Meteo, CHN	ITA2 75 Bd: 0234+0600+0900 ry, wx
12920.5		UNID teleprinter	75
12921.0	ZPK	Asuncion R, PRG	CW
12921.2	MGJ	RN Faslane, G	ITA2 75 Bd: 0744+0824+1110+1730+2330 channel status
12922.0	BPK 32	Beijing Meteo, CHN	ITA2 75 Bd: 0115-0853+2056 wx
12923.0	HLW 2	Soul R, KOR	CW
12925.0	RFA	Astrakhan' R, RUS	CW
	9KK 20	Safat R, KWT	CW
12925.5	UGC	Saint Petersburg R, RUS	CW
	WCC	Chatham R, MA, USA	CW
	4PB	Colombo R, SLK	CW
12928.0	SPH 63	Gdynia R, POL	CW
12930.0	DYP	Cebu R, PHL	CW
12930.5	JYO	Aqaba R, JOR	CW
12931.0	5BA	Nicosia R, CYP	CW
12932.5		UNID teleprinter	ITA2 100 encrypted
12933.0	UFZ	Vladivostok R, SE, RUS	CW
12934.5	EDZ 5	Madrid R, E	CW
12935.0	HLG	Soul R, KOR	CW

12935.0	UHK	Batumi R, GEO	CW
12936.0	DZN	Navotas R, PHL	CW
12938.0	OBC	Callao R, PRU	CW
12939.0	SPE 61	Szczecin R, POL	CW
12940.0	LZW 53	Varna R, BUL	CW
12942.0	JNA	JN Tokyo, J	CW
	RKLM	Arkhangelsk R, RUS	CW
12943.5	ZLP 5	RNZN Auckland, NZL	CW
	9MG 3	Georgetown R, Pin. I., MLA	CW
12947.0	**UUI**	**Odessa R, UKR**	**ITA2 50 Bd: 0520-2020 R tts wtsca**
			CW
12948.0	DYV	Iloilo R, PHL	CW
12950.0	UUI	Odessa R, UKR	CW
12954.0	DZU	Pasig R, PHL	CW
	XSG	Shanghai R, CHN	CW
12955.0	UFL	Vladivostok R, SE, RUS	CW
12957.0	CBV	Valparaiso R, CHL	CW
12958.5	PPO	Olinda R, B	CW
12961.5	**CCS**	**CN Santiago, CHL**	**ITA2 100 Bd: 2100-2315 tfc or wx**
	WCC	Chatham R, MA, USA	CW
12965.0	USO	Izmail R, UKR	CW
12966.0	VWB	Mumbai R, IND	CW
12966.8	A7D	Doha R, QAT	CW
12967.0	UJE	Moscow R, RUS	CW
12968.0	9GX	Tema R, GHA	CW
12969.0	XSV	Tianjin R, CHN	CW
12970.0	URL	Sevastopol' R, UKR	CW
12970.5	PKB	Belawan R, INS	CW
	PKX	Jakarta R, INS	CW
	SUH 4	Alexandria R, EGY	CW
12972.0	DZH	Manila R, PHL	CW
12973.0	PPR	Rio de Janeiro R, B	CW
	UIW	**Kaliningrad R, RUS**	**ITA2 50 Bd: 24 h ry or R tts wtsca; QSX 12455.0 kHz**
			CW
12977.0	URL	Sevastopol' R, UKR	CW
12979.5	PPL	Belem R, B	CW
12980.0	UGH	Provideniya R, FE, RUS	CW
12984.0	DZM	Bulacan R, PHL	CW
	VNG	Sydney TS, NSW, AUS	CW
	ZPK	Asuncion R, PRG	CW
	4XZ	IN Haifa, ISR	CW
12988.5	LPD 88	General Pacheco R, ARG	CW
12990.0	DZJ	Bulacan R, PHL	CW
	UFC	**Nakhodka R, SE, RUS**	**ITA2 50 Bd: 0116+0728 R tts wtsca**
			CW
	UIS	Tuapse R, RUS	CW
12992.0	**WLO**	**Mobile R, AL, USA**	**SITOR-B: H+35 tfc list, wx**
			CW
12993.0	D4A	Mindelo R, S. Vicente, CPV	CW
	URL	Sevastopol' R, UKR	CW
12995.0	9GP	Tema R, GHA	CW
12995.3	ELZ	Cape Palmas R, LBR	CW
12996.0	IAR	Rome R, I	CW
12997.0	XSQ	Guangzhou R, CHN	CW
12997.5	UUI	Odessa R, UKR	CW
13000.0	UBE	Petropavl.-Km. R, FE, RUS	CW

13002.0	KPH	San Francisco R, CA, USA	CW
13005.0	JYO	Aqaba R, JOR	CW
13006.5	GKK 5	Portishead R, G	CW
	XFE	Ensenada R, MEX	CW
13007.0	OLP	Prague R, CZE	CW
13008.0	DZI	Bacoor R, PHL	CW
	JOR	Nagasaki R, J	CW
13008.8	7TF 8	Boufarik R, ALG	CW
13011.0	AQP 6	PN Karachi, PAK	CW
	IAR	Rome R, I	CW
	WNU	Slidell R, LA, USA	CW
	ZPK	Asuncion R, PRG	CW
13014.0	CLS	Habana R, CUB	CW
13014.5	XDA	Mexico City R, MEX	CW
13015.5	IAR	Rome R, I	CW
	OBC	Callao R, PRU	CW
	OBF	Mollendo R, PRU	CW
	OBQ	Iquitos R, PRU	CW
13016.7		**Egyptian E Sarajevo, BIH**	**SITOR-A: 1355 ATU-A msgs to Cairo, s. off**
13019.8	GKC 5	Portishead R, G	CW
13020.4	VRX	Victoria Harbour R, HKG	CW
13022.0	SPE 63	Szczecin R, POL	CW
13023.0	D3E 62	Luanda R, AGL	CW
13024.0	A7D	Doha R, QAT	CW
	S3E	Khulna R, BGD	CW
13024.5	ASK	Karachi R, PAK	CW
13024.9	WLO	Mobile R, AL, USA	CW
13029.0	SVB 5	Athens R, GRC	CW
13030.0	**UGC**	**Saint Petersburg R, RUS**	**ITA2 50 Bd: 0823 + 1340 R tts wtsca** CW
13031.0	VRX	Victoria Harbour R, HKG	CW
13031.2	**FUF**	**FN Fort de France, MRT**	**ITA2 75 Bd: 24 h ry**
13033.5	WCC	Chatham R, MA, USA	CW
13035.0	UFH	Petropavl.-Km. R, FE, RUS	CW
13039.3	ZAD 2	Durres R, ALB	CW
13041.0	UUI	Odessa R, UKR	CW
13042.0	P2M	Port Moresby R, PNG	CW
13042.5	C5G	Banjul R, GMB	CW
	FUV	**FN Jibuti, DJI**	**ITA2 75 Bd: 24 h ry**
	XVS 9	Ho Chi Minh Ville R, VTN	CW
	9LL	Freetown R, SRL	CW
13044.0	VRX	Victoria Harbour R, HKG	CW
13046.0	PZN 4	Paramaribo R, SUR	CW
13047.0	SVF 5	Athens R, GRC	CW
13049.5	HPP	Panama R, PNR	CW
13050.0	**UDK**	**Murmansk R, RUS**	**ITA2 50 Bd: 0631-2140 R tts wtsca** CW
13051.0		**UNID teleprinter**	**81**
13051.5	ASK	Karachi R, PAK	CW
13054.0	JDC	Choshi R, J	CW
	UIW	**Kaliningrad R, RUS**	**ITA2 50 Bd: 0809 + 1315-2231 ry or R tts wtsca** CW
	XSQ	Guangzhou R, CHN	CW
13055.0	**UTQ**	**Kiyev R, UKR**	**ITA2 50 Bd: 1537 s. on with R tts wtsca** CW

13056.0	C9L 2	Maputo R, MOZ	CW	
	C9L 6	Mocambique R, MOZ	CW	
	EDG 4	Madrid R, E	CW	
	S3D	Chittagong R, BGD	CW	
13057.0	OMC	Bratislava R, SVK	CW	
13059.0	**EBA**	**SN Madrid, E**	**ITA2 75 Bd: 1000 navigational warnings**	
			CW	
13060.0	SUP	Port Said R, EGY	CW	
	UFJ	Rostov-na-Donu R, RUS	CW	
13060.5	TUA 5	Abidjan R, CTI	CW	
	7OA	Aden R, YEM	CW	
13062.0	CLA 32	Habana R, CUB	CW	
13063.0	JDB	Nagasaki R, J	CW	
13063.5	WSC	Tuckerton R, NJ, USA	CW	
13065.0	EAD 4	Madrid R, E	CW	
	ESP	Pärnu R, EST	CW	
	5ZF 3	Mombasa R, KEN	CW	
	6YI	Kingston R, JMC	CW	
13065.5	5OW 13	Lagos R, NIG	CW	
13069.0	TJC 8	Douala R, CME	CW	
13069.5	JOS	Nagasaki R, J	CW	
13070.0	YLQ	Riga R, LVA	CW	
	3AC 13	Monte Carlo R, MCO	CW	
13071.3	7TF 8	Boufarik R, ALG	CW	
13073.0	FFT 6	Saint Lys R, F	CW	
13073.5	**'C37A'**	**MOSSAD Tel Aviv, ISR**	**ARQ-E 288 Bd: 0612-1905 encrypted tfc to '6XM8' BNDVB Bonn**	
13076.5	JNA	JN Tokyo, J	CW	
13076.7	HZG	Dammam R, ARS	CW	
13077.0		coast stations, ch 1201	SSB	QSX 12230.0 kHz
	A7D	Doha R, QAT		
	BVA	T'ai-pei R, TAI		
	DZJ	Bulacan R, PHL		
	DZZ	Manila R, PHL		
	EHY	Madrid R, E		
	GKT 51	Portishead R, G		
	KMI	Dixon R, CA, USA		
	PKB	Belawan R, INS		
	PKF	Ujung Pandang R, INS		
	UAT	Moscow R, RUS		
	UIK	Vladivostok R, SE, RUS		
	VFF	CCG Iqaluit, NWT, CAN		
	XSU	Yantai R, CHN		
	5BA 52	Nicosia R, CYP		
13080.0		coast stations, ch 1202	SSB	QSX 12233.0 kHz
	DZA	Mandaluyong R, PHL		
	GKT 52	Portishead R, G		
	HEB 13	Berne R, SUI		
	HZG	Dammam R, ARS		
	KMI	Dixon R, CA, USA		
	SVN 51	Athens R, GRC		
	S3D	Chittagong R, BGD		
	3DP	Suva R, FJI		
13083.0		coast stations, ch 1203	SSB	QSX 12236.0 kHz
	CUL	Lisbon R, POR		
	D3E	Luanda R, AGL		
	D4A	Mindelo R, S. Vicente, CPV		
	HKB	Barranquilla R, CLM		

13083.0	HKC	Buenaventura R, CLM		
	J5M	Bissau R, GNB		
	KMI	Dixon R, CA, USA		
	SAG	Goeteborg R, S		
	UCZ	Provideniya R, FE, RUS		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	WOO	Ocean Gate R, NJ, USA		
	XSG	Shanghai R, CHN		
	YIR	Basrah R, IRQ		
	3AC	Monte Carlo R, MCO		
	5AT	Tripoli R, LBY		
13086.0		coast stations, ch 1204	SSB	QSX 12239.0 kHz
	DYO	Cebu R, PHL		
	HPP 20	Panama R, PNR		
	HSA	Bangkok R, THA		
	LFL 31	Rogaland R, NOR		
	S9M	Sao Tome R, STP		
	UGC	Saint Petersburg R, RUS		
	UIW	Kaliningrad R, RUS		
	4XO	Haifa R, ISR		
13089.0		coast stations, ch 1205	SSB	QSX 12242.0 kHz
	FJP 24	Noumea R, NCL		
	IAR	Rome R, I		
	LPL	General Pacheco R, ARG		
	LYK	Klaipeda R, LTU		
	NMC	USCG S. Franc., CA, USA		
	NMF	USCG Boston, MA, USA		
	NMG	USCG N. Orleans, LA, USA		
	NMN	USCG Portsmouth, VA, USA		
	NMO	USCG Honolulu, HWA		
	NRV	USCG Apra Harbour, GUM		
	S3D	Chittagong R, BGD		
	TUA	Abidjan R, CTI		
	UFA	Batumi R, GEO		
	UTT	Odessa R, UKR		
	YKM 7	Al Ladhiqiyah R, SYR		
	YLQ	Riga R, LVA		
13092.0		coast stations, ch 1206	SSB	QSX 12245.0 kHz
	GKT 56	Portishead R, G		
	IAR	Rome R, I		
	OHG 2	Helsinki R, FIN		
	TAM	Mersin R, TUR		
	TFA	Reykjavik R, ISL		
	WOM	Miami R, FL, USA		
	XSV	Tianjin R, CHN		
	ZAD	Durres R, ALB		
	5RS	Toamasina R, MDG		
13095.0		coast stations, ch 1207	SSB	QSX 12248.0 kHz
	BVA	T'ai-pei R, TAI		
	CUL	Lisbon R, POR		
	D4A	Mindelo R, S. Vicente, CPV		
	HCG	Guayaquil R, EQA		
	JBO	Tokyo R, J		
	OSU 51	Oostende R, BEL		
	PCG 52	Scheveningen R, NLD		

13095.0	PZN	Paramaribo R, SUR		
	SVN 53	Athens R, GRC		
	UHY	Murmansk R, RUS		
	VAI	CCG Vancouver, BC, CAN		
	VCT	Tors Cove R, NFLD, CAN		
	XSQ	Guangzhou R, CHN		
	YUW	Bar R, SRB		
	4XO	Haifa R, ISR		
	7TF 41	Boufarik R, ALG		
13098.0		coast stations, ch 1208	SSB	QSX 12251.0 kHz
	BVA	T'ai-pei R, TAI		
	JBO	Tokyo R, J		
	LPG	Rio Gallegos R, ARG		
	LYL	Klaipeda R, LTU		
	S3D	Chittagong R, BGD		
	TFA	Reykjavik R, ISL		
	WOM	Miami R, FL, USA		
	5BA 54	Nicosia R, CYP		
13101.0		coast stations, ch 1209	SSB	QSX 12254.0 kHz
	A9M	Hamala R, BHR		
	ESA	Tallinn R, EST		
	IAR	Rome R, I		
	OBF	Mollendo R, PRU		
	PKP	Dumai R, INS		
	PPL	Belem R, B		
	SPW 62	Warsaw R, POL		
	UDN	Novorossiysk R, RUS		
	WOM	Miami R, FL, USA		
	XDA	Mexico City R, MEX		
	XFB	Ciudad del Carmen R, MEX		
	XFM	Manzanillo R, MEX		
	XFP	Chetumal R, MEX		
	XFY	Guaymas R, MEX		
	ZSC 27	Cape Town R, AFS		
13104.0		coast stations, ch 1210	SSB	QSX 12257.0 kHz
	CWF	Punta Carretas R, URG		
	EHY	Madrid R, E		
	HEB 43	Berne R, SUI		
	J2A	Jibuti R, DJI		
	OXZ	Lyngby R, DNK		
	PKE	Amboina R, INS		
	PKM	Bitung R, INS		
	PKX	Jakarta R, INS		
	UBE	Petropavl.-Km. R, FE, RUS		
	VWB	Mumbai R, IND		
	WOO	Ocean Gate R, NJ, USA		
13107.0		coast stations, ch 1211	SSB	QSX 12260.0 kHz
	IAR	Rome R, I		
	LFL 34	Rogaland R, NOR		
	PPO	Olinda R, B		
	UCY	Astrakhan' R, RUS		
	WOO	Ocean Gate R, NJ, USA		
	XSQ	Guangzhou R, CHN		
	YIR	Basrah R, IRQ		
	9MG 22	Georgetown R, Pin. I., MLA		
13110.0		coast stations, ch 1212	SSB	QSX 12263.0 kHz
	DXF	Davao R, PHL		
	JBO	Tokyo R, J		
	OBQ	Iquitos R, PRU		
	PKD	Surabaya R, INS		

13110.0	PKG	Banjarmasin R, INS		
	PNK	Jayapura R, INS		
	SVN 55	Athens R, GRC		
	WLO	Mobile R, AL, USA		
	YKO	Tartous R, SYR		
	6VA	Dakar R, SEN		
		Abidjan F R, CTI		
13113.0		coast stations, ch 1213	SSB	QSX 12266.0 kHz
	BVA	T'ai-pei R, TAI		
	HLS	Soul R, KOR		
	IAR	Rome R, I		
	LPW	Bahia Blanca R, ARG		
	OSU 53	Oostende R, BEL		
	PCG 51	Scheveningen R, NLD		
	S9M	Sao Tome R, STP		
	XSG	Shanghai R, CHN		
	5WA	Apia R, SMO		
	8PO	Bridgetown R, BRB		
13116.0		coast stations, ch 1214	SSB	QSX 12269.0 kHz
	ASK	Karachi R, PAK		
	CLA 69	Habana R, CUB		
	HSA	Bangkok R, THA		
	OXZ	Lyngby R, DNK		
	PPR	Rio de Janeiro R, B		
	UFO	Kholmsk R, FE, RUS		
	VFA	CCG Inuvik, NWT, CAN		
		many RAN stations, AUS		
13119.0		coast stations, ch 1215	SSB	QSX 12272.0 kHz
	A3A	Nuku'alofa R, TON		
	OBC	Callao R, PRU		
	OSU 52	Oostende R, BEL		
	SAG	Goeteborg R, S		
	S7Q	Victoria R, Mahe, SEY		
	TFA	Reykjavik R, ISL		
	WOM	Miami R, FL, USA		
	4XO	Haifa R, ISR		
	7TF 42	Boufarik R, ALG		
13122.0		coast stations, ch 1216	SSB	QSX 12275.0 kHz
	BVA	T'ai-pei R, TAI		
	LPZ	Trelew R, ARG		
	ODR 8	Beirut R, LBN		
	SPC 61	Gdynia R, POL		
	SUH	Alexandria R, EGY		
	TAM	Mersin R, TUR		
	XSV	Tianjin R, CHN		
	9VG 66	Singapore R, SNG		
13125.0		coast stations, ch 1217	SSB	QSX 12278.0 kHz
	CLA 68	Habana R, CUB		
	LFL 37	Rogaland R, NOR		
	LZW	Varna R, BUL		
	OXZ	Lyngby R, DNK		
	UTQ	Kiyev R, UKR		
	VWM	Madras R, IND		
	YIR	Basrah R, IRQ		
	7TF 43	Boufarik R, ALG		
13128.0		coast stations, ch 1218	SSB	QSX 12281.0 kHz
	D4D	Praia R, Santiago, CPV		
	IAR	Rome R, I		
	JBO	Tokyo R, J		
	OSU 54	Oostende R, BEL		

13128.0	S3E	Khulna R, BGD		
	TAH	Istanbul R, TUR		
13131.0		coast stations, ch 1219	SSB	QSX 12284.0 kHz
	LZL	Bourgas R, BUL		
	LZW	Varna R, BUL		
	OSU 57	Oostende R, BEL		
	OXZ	Lyngby R, DNK		
	PCG 53	Scheveningen R, NLD		
	PPR	Rio de Janeiro R, B		
	SAG	Goeteborg R, S		
	9VG 67	Singapore R, SNG		
13134.0		coast stations, ch 1220	SSB	QSX 12287.0 kHz
	DZI	Bacoor R, PHL		
	DZO	Bulacan R, PHL		
	JFA	Funabashi F R, J		
	JYO	Aqaba R, JOR		
	SPO 61	Szczecin R, POL		
	SVN 58	Athens R, GRC		
	S3E	Khulna R, BGD		
	TFA	Reykjavik R, ISL		
13137.0		coast stations, ch 1221 (WORLDWIDE CALLING FREQ.)	SSB	QSX 12290.0 kHz
13140.0		coast stations, ch 1222	SSB	QSX 12293.0 kHz
	FFL 64	Saint Lys R, F		
	KEJ	Hoolehua R, HWA		
	LGQ	Rogaland R, NOR		
	LPX	Com. Rivadavia R, ARG		
	TAH	Istanbul R, TUR		
	TAR	Zonguldak R, TUR		
	XFA	Acapulco R, MEX		
	XFE	Ensenada R, MEX		
	XFK	La Paz R, MEX		
	YQI 51	Constanta R, ROU		
	ZKR	Avarua R, Rarotg. I., CKH		
	9GX	Tema R, GHA		
13143.0		coast stations, ch 1223	SSB	QSX 12296.0 kHz
	CNP	Casablanca R, MRC		
	DZF	Bacoor R, PHL		
	HZG	Dammam R, ARS		
	OXZ	Lyngby R, DNK		
	PPM	Manaus R, B		
	SAG	Goeteborg R, S		
	S3D	Chittagong R, BGD		
	UTW	Mariupol R, UKR		
	WOM	Miami R, FL, USA		
13146.0		coast stations, ch 1224	SSB	QSX 12299.0 kHz
	GKV 54	Portishead R, G		
	ZLA	Awanui R, NZL		
	ZSD 56	Durban R, AFS		
	3AC 12	Monte Carlo R, MCO		
	4PB	Colombo R, SLK		
	6YI	Kingston R, JMC		
	9AR	Rijeka R, HRV		
	9KK 9	Safat R, KWT		
13149.0		coast stations, ch 1225	SSB	QSX 12302.0 kHz
	DZO	Bulacan R, PHL		
	EHY	Madrid R, E		
	JYO	Aqaba R, JOR		
	LFL 42	Rogaland R, NOR		
	P2M	Port Moresby R, PNG		

13149.0	UHS	Murmansk R, RUS		
	WLO	Mobile R, AL, USA		
	XDA	Mexico City R, MEX		
	XFC	Cozumel R, MEX		
	XFL	Mazatlan R, MEX		
	XFN	Progreso R, MEX		
	XFQ	Salina Cruz R, MEX		
	XSQ	Guangzhou R, CHN		
	ZHH	Jamestown R, SHN		
	5RS	Toamasina R, MDG		
13152.0		coast stations, ch 1226	SSB	QSX 12305.0 kHz
	FFL 61	Saint Lys R, F		
	OXZ	Lyngby R, DNK		
	SAG	Goeteborg R, S		
	S3E	Khulna R, BGD		
	TAT	Canakkale R, TUR		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	WLO	Mobile R, AL, USA		
13155.0		coast stations, ch 1227	SSB	QSX 12308.0 kHz
	EHY	Madrid R, E		
	HEB 23	Berne R, SUI		
	OHG 2	Helsinki R, FIN		
	SPO 62	Szczecin R, POL		
	TJC	Douala R, CME		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	9KK 92	Safat R, KWT		
	9PA	Banana R, ZAI		
13158.0		coast stations, ch 1228	SSB	QSX 12311.0 kHz
	ASK	Karachi R, PAK		
	BVA	T'ai-pei R, TAI		
	CLA 71	Habana R, CUB		
	DZM	Bulacan R, PHL		
	GKV 58	Portishead R, G		
	LFL 44	Rogaland R, NOR		
	PPJ	Juncao R, B		
	PPL	Belem R, B		
	UIW	Kaliningrad R, RUS		
	UTQ	Kiyev R, UKR		
	WOO	Ocean Gate R, NJ, USA		
	8Q2	Male R, MLD		
13161.0		coast stations, ch 1229	SSB	QSX 12314.0 kHz
	A7D	Doha R, QAT		
	FFL 62	Saint Lys R, F		
	HLS	Soul R, KOR		
	KMI	Dixon R, CA, USA		
	LPL	General Pacheco R, ARG		
	LZR	Ruse R, BUL		
	SPW 61	Warsaw R, POL		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		

13161.0	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	YLQ	Riga R, LVA		
	9AR	Rijeka R, HRV		
13164.0		coast stations, ch 1230	SSB	QSX 12317.0 kHz
	A3A	Nuku'alofa R, TON		
	GKV 50	Portishead R, G		
	HEB 33	Berne R, SUI		
	IAR	Rome R, I		
	KMI	Dixon R, CA, USA		
	S3D	Chittagong R, BGD		
	WOM	Miami R, FL, USA		
	WOO	Ocean Gate R, NJ, USA		
	5BA 56	Nicosia R, CYP		
13167.0		coast stations, ch 1231	SSB	QSX 12320.0 kHz
	FFL 63	Saint Lys R, F		
	OBY	Paita R, PRU		
	SPC 64	Gdynia R, POL		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	VRX	Victoria Harbour R, HKG		
	ZPC	Asuncion R, PRG		
	5AB	Benghazi R, LBY		
	8Q2	Male R, MLD		
13170.0		coast stations, ch 1232	SSB	QSX 12323.0 kHz
	ASK	Karachi R, PAK		
	DZJ	Bulacan R, PHL		
	GKW 52	Portishead R, G		
	HPP 20	Panama R, PNR		
	KUQ	Pago Pago R, SMA		
	LPM	Mar del Plata R, ARG		
	SVN 59	Athens R, GRC		
	7TF 44	Boufarik R, ALG		
13173.0		coast stations, ch 1233	SSB	QSX 12326.0 kHz
	HKB	Barranquilla R, CLM		
	HKC	Buenaventura R, CLM		
	JNA	JN Tokyo, J		
	PPL	Belem R, B		
	TAH	Istanbul R, TUR		
	UGE	Arkhangelsk R, RUS		
	WLO	Mobile R, AL, USA		
	9HD	Valetta R, MLT		
13176.0		coast stations, ch 1234	SSB	QSX 12329.0 kHz
	A4M	Muscat R, OMA		
	EHY	Madrid R, E		
	HKB	Barranquilla R, CLM		
	HKC	Buenaventura R, CLM		
	KFS	San Francisco R, CA, USA		
	VZX	Penta R, Gosf., NSW, AUS		
13179.0		coast stations, ch 1235	SSB	QSX 12332.0 kHz
	DZD	Manila R, PHL		
	FFL 65	Saint Lys R, F		
	JNA	JN Tokyo, J		
	LSD 836	Buenos Aires R, ARG		

13179.0	WLO	Mobile R, AL, USA		
	YLQ	Riga R, LVA		
13182.0		coast stations, ch 1236	SSB	QSX 12335.0 kHz
	IAR	Rome R, I		
	KGN	Delcambre R, LA, USA		
	XYR	Yangon R, MYA		
13185.0		coast stations, ch 1237	SSB	QSX 12338.0 kHz
	DZM	Bulacan R, PHL		
	FFL 66	Saint Lys R, F		
	HEB 53	Berne R, SUI		
	WNU	Slidell R, LA, USA		
	4XO	Haifa R, ISR		
13188.0		coast stations, ch 1238	SSB	QSX 12341.0 kHz
	PPM	Manaus R, B		
	UAT	Moscow R, RUS		
	XSG	Shanghai R, CHN		
	3AC 12	Monte Carlo R, MCO		
13191.0		coast stations, ch 1239	SSB	QSX 12344.0 kHz
	A7D	Doha R, QAT		
	DZM	Bulacan R, PHL		
	EHY	Madrid R, E		
	FFL 67	Saint Lys R, F		
	LZW	Varna R, BUL		
	TAH	Istanbul R, TUR		
	UDN	Novorossiysk R, RUS		
	VCT	Tors Cove R, NFLD, CAN		
	9AR	Rijeka R, HRV		
13194.0		coast stations, ch 1240	SSB	QSX 12347.0 kHz
	CUL	Lisbon R, POR		
	LSD 836	Buenos Aires R, ARG		
	SVN 57	Athens R, GRC		
	VRX	Victoria Harbour R, HKG		
13197.0		coast stations, ch 1241	SSB	QSX 12350.0 kHz
	UUI	Odessa R, UKR		

13200.0 - 13260.0 AERONAUTICAL MOBILE (OR)

13200.0		AMS	SSB
	AFH	USAF A. AFB, Balboa, PNR	
	AFI	USAF McClellan, CA, USA	
	AFS	USAF Offutt AFB, NE, USA	
	AGA	USAF Hickam AFB, HWA	
	AIE	USAF Andersen AFB, GUM	
	AIF	USAF Yokota, J	
	AJE	USAF Croughton, G	
	AKA	USAF Elmendorf AFB, ALS	
	CUW	PAF/USAF Lajes AFB, AZR	
	XPH	USAF Thule AFB, GRL	
		UNID teleprinter	81
13203.0		AMS	SSB
	AFA	USAF Andrews, MD, USA	
	AFE	USAF MacDill, FL, USA	
	AFE 83	USAF Wideawake, ASC	
13205.0	HEE 60	Berne Air, SUI	
13206.0		AMS	SSB
	AXF	RAAF Sydney, NSW, AUS	
	AXH	RAAF Townsv., QLD, AUS	
	AXI	RAAF Darwin, NT, AUS	
	ZKX	RNZAF Auckland, NZL	

13209.0		AMS	SSB
	AFA	USAF Andrews, MD, USA	
	AFE	USAF MacDill, FL, USA	
	AFI	USAF McClellan, CA, USA	
	AFS	USAF Offutt AFB, NE, USA	
13212.0		AMS	SSB
13215.0		AMS	SSB
13218.0		AMS	SSB
13220.0		IAF Sarajevo, BIH	SSB
13221.0		AMS	SSB
13224.0		AMS	SSB
13225.0	JYJ	RJ Amman, JOR	SSB
13226.0		UNID teleprinter	75
13227.0		AMS	SSB
13230.0		AMS	SSB
13233.0		AMS	SSB
13236.0		AMS	SSB
13239.0		AMS	SSB
13242.0		AMS	SSB
	AFA	USAF Andrews, MD, USA	
	AFE	USAF MacDill, FL, USA	
	AFE 83	USAF Wideawake, ASC	
	AFH	USAF A. AFB, Balboa, PNR	
	AFI	USAF McClellan, CA, USA	
	AGA	USAF Hickam AFB, HWA	
	AKA	USAF Elmendorf AFB, ALS	
	CUW	PAF/USAF Lajes AFB, AZR	
13245.0		AMS	SSB
13248.0		AMS	SSB
	AFA	USAF Andrews, MD, USA	
	AFH	USAF A. AFB, Balboa, PNR	
	AFI	USAF McClellan, CA, USA	
13251.0		AMS	SSB
13254.0		AMS	SSB
	CFH	CF Halifax, NS, CAN	
	CJX	CF St. John's, NFLD, CAN	
	NKW	USN Diego Garcia, DGA	COMB
	VXA	CF Edmonton, ALTA, CAN	
13257.0		AMS	SSB
	CHR	CF Trenton, ONT, CAN	
	CJX	CF St. John's, NFLD, CAN	
	VXA	CF Edmonton, ALTA, CAN	
13259.0		UNID teleprinter	300

13260.0 - 13360.0 AERONAUTICAL MOBILE (R)

13261.0		AMS = VAFI	SSB
13264.0		AMS = 14, VEUR	SSB
13267.0		AMS = 3 13H	SSB
13270.0		AMS = 6G, VNAT	SSB
13273.0		AMS = AFI	SSB
13276.0		AMS = 6G, VNAT	SSB
13279.0		AMS = VNCA VSAM	SSB
13282.0		AMS = VPAC	SSB
13285.0		AMS = 10, VSEA	SSB
13288.0		AMS = AFI EUR MID	SSB
13291.0		AMS = NAT, 6	SSB
13294.0		AMS = AFI	SSB
13297.0		AMS = CAR EA SAM	SSB

13300.0		AMS = CEP CWP NP SP, 4	SSB
13303.0		AMS = EA NCA	SSB
13306.0		AMS = INO NAT	SSB
13309.0		AMS = EA SEA, 13C 13K	SSB
13312.0		AMS = MID, 11B	SSB
13315.0		AMS = NCA SAT	SSB
13318.0		AMS = SEA, 13	SSB
13318.7		MFA Cairo, EGY	SITOR-A: 1125 ATU-A msg
13321.0		AMS = 2 3	SSB
13324.0		AMS = W I/III	SSB
13327.0		AMS = W I/IV	SSB
13330.0		AMS = W II/V	SSB
13333.0		AMS = W I/III	SSB
13336.0		AMS = W I/IV	SSB
13339.0		AMS = W II/V	SSB
13341.7		MFA Cairo, EGY	SITOR-A: 1439+1515 tfc, 1557 msg to European embassies
13342.0		AMS = W I/III	SSB
13345.0		AMS = W I/IV	SSB
13347.7		Egyptian E Amman, JOR	SITOR-A: 1300 msg (5lgs) + ATU-A msgs to Cairo
		Egyptian E Safat, KWT	SITOR-A: 1703 ATU-A msgs to Cairo
		MFA Cairo, EGY	SITOR-A: 1310+1508 ATU-A msg, 1733+1756 tfc
13348.0		AMS = W II/V	SSB
13351.0		AMS = W I/III	SSB
13354.0		AMS = 5 7	SSB
13357.0		AMS = SAT, 2	SSB

13360.0 - 13410.0 FIXED + RADIO ASTRONOMY <533>

13366.5	5YD	Nairobi Air, KEN	ITA2 50 Bd: 24 h ry or msgs [KVA]
13370.0	RKU 72	R Moscow feeder, RUS	SSB
13373.5	5YD	Nairobi Air, KEN	ITA2 50 Bd: 24 h ry or msgs [KVA]
13375.5	DMK	MFA Bonn, D	ALIS: 1212 tfc, 1248 tfc to Tripoli, 1743+2043 tfc
		German E Athens, GRC	ARQ-E 96 Bd: 0800 tfc to DMK Bonn
		German E Tripoli, LBY	ALIS: 1248 msg to DMK Bonn
13376.5		Guardia Civil Las Palmas, CNR	SITOR-A: 1734 msgs to 'RETXX' Madrid
13380.2		ADM Rio Matola, MOZ	SITOR-A: 1448 msg to Den Haag
		ADM Den Haag, NLD	SITOR-A: 1448 tfc to Rio Matola
13386.0		UNID teleprinter	75
13388.0		MFA Oslo, NOR	TWINPLEX YYBB YBYB: SITOR-A: 0920 msgs, 0945 tfc, 1945+1859 msg (N nx)
13393.0		UNID teleprinter	75
13397.0	'DFZG'	MFA Belgrade, SRB	ITA2 75 Bd: 0616-0922 msgs or msg (Serbian nx) or encrypted msg after "FZFZFZ..."
13399.0	'DFZG'	MFA Belgrade, SRB	ITA2 75 Bd: 0500-1615+2300 ry or tfc or msg or encrypted msg after "XFXFXF..." or msg (E or Serbian nx)

13401.7		MFA Cairo, EGY	SITOR-A: 0731-1451 ATU-A msgs
13403.0		Polish E Paris, F	POL-ARQ 100 Bd: 1540 msg to SNN 299 Warsaw
13403.1		UNID Serbian diplomatic station (396)	FEC-A 144 Bd: 1345 encrypted tfc after "DDD...", s. off
13408.3		UNID station (896)	Packet Radio: 1042 Indonesian military msgs

13410.0 - 13570.0 FIXED + Mobile except aeronautical mobile (R) <534>

13410.0	FUX	FN Le Port, REU	ITA2 75 Bd: 24 h encrypted tfc
13411.6		UNID teleprinter	100
13415.3	PCW 1	MFA Den Haag, NLD	SITOR-A: 24 h tfc
			CW
13416.3		Bulgarian E Baghdad, IRQ	ITA2 75 Bd: 1010 msg + tfc to 'DOR' Sofia
13418.0	'KIT'	Bulgarian E Kiyev, UKR	ITA2 75 Bd: 1037 msg (Bulgarian press review) to 'DOR' Sofia
13419.0	'6XM8'	BNDVB Bonn, D	ARQ-E 288 Bd: 0711-1813 tfc or encrypted tfc or final tfc "qsy 22" to 'C37A' MOSSAD Tel Aviv
			ITA2 100 Bd: 0714 clg + tfc to 'C37A' MOSSAD Tel Aviv
13421.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 1515 msgs; 1604 msg (5fgs) to Baghdad
13421.5		Spanish E Moscow, RUS	TWINPLEX YYBB BYBY: SITOR-A: 1250 msg (10lgs) to EAE 220 Madrid
13427.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 0846 final tfc, s. off; 1919 ry, tfc + msgs to Habana; 2038 msg (Bulgarian nx)
		Bulgarian E Madrid, E	ITA2 75 Bd: 0851 msg to 'DOR' Sofia
		UNID teleprinter	75
13428.4	7RQ 20	MFA El Djaza'ir, ALG	Coquelet 8: 0937 "bulletin d' information", 0950 msg to Brussels, 1439 msg + tfc to Bonn or Brussels
13430.0	VTK	IN Tuticorin, IND	CW
13430.7	'RFFVAE'	FF Dhahran, ARS	ARQ-M2 200 Bd: A: 0413 + 0618 + 1204-1706 tfc or msg (5lgs) to 'RFFA' Paris [DET]
13437.0	'RPFN'	PN Lisbon, POR	ITA2 75 Bd: 0124 + 0908 + 1500 clg 'RPTI' Ponta Delgada
13438.6	DGN 43	PIAB Bonn, D	FEC-A 96 Bd: 0830-1030 G nx
13440.0	AFA	USAF Andrews, MD, USA	SSB
	YZI 235	TANJUG Belgrade, SRB	ITA2 50 Bd: 0000 + 0900 + 1100 + 1300 E nx
13443.0		UNID teleprinter	200
13444.2	'RFQP'	FF Jibuti, DJI	ARQ-E3 100 Bd: 24 h msgs or encrypted tfc after "KKKK..." or "controle de voie" to 'RFVI' Le Port [FKO]
13446.0	WGY 9..	many FEMA stations, USA	SSB
		Polish E Athens, GRC	POL-ARQ 100 Bd: 1207-1320 tfc or msg to SNN 299 Warsaw
13446.5		Italian E Brussels, BEL	SITOR-A: 0938 msgs to Rome

13446.7		Egyptian E Dakar, SEN	SITOR-A: 1808 ATU-A tfc to Cairo
			SITOR-B: 1807 ATU-A tfc to Cairo
13448.7	GYU	RN Gibraltar, GIB	ITA2 75 Bd: 0813 clg + tfc to MUH 27, 1225 ry
13452.0		UNID teleprinter	75
13456.0		Bulgarian E Moscow, RUS	ITA2 120 Bd: 0815 encrypted msgs after "DDDD..." + msg (Bulgarian nx)
13462.2		MFA Bucharest, ROU	RUM-FEC 218 Bd: 1215+1222 encrypted tfc
13465.0	'DOR'	MFA Sofia, BUL	ITA2 150 Bd: 1302 msg (E nx)
13465.2	'RFFA'	MOD Paris, F	ARQ-E3 200 Bd: 0619-2109 tfc or msg (F nx) or msg (5lgs) after "BBBB" to 'RFFVAE' Dhahran [QVX]
13473.0	GYU	RN Gibraltar, GIB	VFT: ARQ-M2 96 Bd: A: 2018 final tfc
			VFT: ITA2 75 Bd: 1518+1804 encrypted tfc
13478.0	'RPTI'	PN Ponta Delgada, AZR	ITA2 75 Bd: 1500 clg 'RPFN' Lisbon
13479.7	'RFFP'	MOD Paris, F	ARQ-M2 200 Bd: A: 1245 msg, 1358 AFTN msgs, 1501+1841 msg [FDXA]
			B: 1245 msgs, 1358 msg (5lgs)
13480.0		UNID teleprinter	200
13486.7		Egyptian E London, G	SITOR-A: 0851 ATU-A msg to Cairo
		MFA Cairo, EGY	SITOR-A: 0853+1020 ATU-A msgs
13496.0		MFA Oslo, NOR	TWINPLEX YYBB YBYB: SITOR-A: 0904+1037 msg
13501.7		Egyptian E Madrid, E	SITOR-A: 1640 ATU-A msgs to Cairo
13505.7		Egyptian E Tripoli, LBY	SITOR-A: 0944 clg Cairo, 1230+1252 msg (5lgs) to Cairo, 1315 msg to Cairo
13506.0	RLX	SOUD Moscow, RUS	ITA2 75 Bd: 0906 s. on with msg (5lgs) to 'UXW', 0932 msg (5lgs) to 'UXW'
			CW
13507.5	DMK	MFA Bonn, D	FEC-A (!) 96 Bd: 1632 ry, 1658 s. off
13510.0	CFH	CF Halifax, NS, CAN	ITA2 75 Bd: 0847-2300 ry or wx
			FAX // 122.5 kHz $
13511.5	DMK	MFA Bonn, D	ALIS: 0815+1227+1250 tfc, 1200+1344 tfc to Athens, 1436 tfc
		German E Athens, GRC	ALIS: 1200 encrypted msg after "VVV..." to DMK Bonn
		German E Madrid, E	ARQ-E 96 Bd: 1020+1032 msg to DMK Bonn, 1300 tfc to DMK
13525.5	GYU	RN Gibraltar, GIB	Piccolo 6: 1135 clg MUH
		UNID teleprinter	200
13527.9	'S'	Beacon Arkhangelsk, RUS	CW
13528.0	'C'	Beacon Moscow, RUS	CW
13530.0	VTP	IN Vishakhapatnam, IND	ITA2 50 Bd: 0430 clg VTR Port Blair

13537.0	'L4N'	French E Dakar, SEN	FEC-A 192 Bd: 1351 msgs (5fgs) to 'P6Z' Paris
	'U3H'	French E Moscow, RUS	FEC-A 192 Bd: 1052 msgs (5lgs) to 'P6Z' Paris
13538.0	*ZRO 3*	*Pretoria Meteo, AFS*	*FAX // 4014.0 kHz $*
13539.0		UNID teleprinter	200
13540.0	OVL	DM Torsh., Faroe Is., DNK	SSB
	OWD	DAF Vaerloese, DNK	SSB
13540.5		UNID teleprinter	MFSK 12
13541.0	HBC 88	ICRC Geneva, SUI	PACTOR: 1645 tfc to 5ZR 88 Nairobi, into SITOR-A: 1647 tfc to 5ZR 88 Nairobi
	5ZR 88	ICRC Nairobi, KEN	PACTOR: 1645 tfc to HBC 88 Geneva, into SITOR-A: 1647 tfc to HBC 88 Geneva
13542.0	ZRO 3	Pretoria Meteo, AFS	ITA2 75 Bd: 0448-1628 wx
	'J5W'	French E Rabat, MRC	FEC-A 192 Bd: 1044 msg (5lgs) after "BBBB" to 'RFGW' Paris
13543.0	LBL 1	Nrw. UNIFIL Naqoura, LBN	SSB
13543.7	'RFTJD'	FF Libreville, GAB	ARQ-E3 192 Bd: 0643-2118 tfc or msgs + msg (5lgs) to 'RFFA' Paris [HAI]
13545.1	PCW 1	MFA Den Haag, NLD	SITOR-A: 0814 msg (5lgs) "van buza aan saa", 1636+1809 tfc CW
13545.3	LBL 1	Norwegian UNIFIL Naqoura, LBN	SITOR-A: 0814 msg (5lgs), 0930+1356 tfc; 1450 final tfc, s. off; 2050 tfc
13546.0		Polish E Ankara, TUR	POL-ARQ 100 Bd: 1144+1208 msg (5fgs) + msg to SNN 299 Warsaw
13547.0	'J5W'	French E Rabat, MRC	FEC-A 192 Bd: 1014 clg + msg to 'P6Z' Paris
13548.0	'L4N'	French E Dakar, SEN	FEC-A 192 Bd: 1330 msg (5lgs) to 'P6Z' Paris
	'U3H'	French E Moscow, RUS	FEC-A 192 Bd: 0822+1822 msg (5lgs) after "BBBB" to 'RFGW' Paris
13549.0	'A9C'	French E Bucharest, ROU	FEC-A 192 Bd: 1403 ry, clg + tfc to 'P6Z' Paris, 1617 tfc to 'P6Z'
	'O9B'	French E Cairo, EGY	FEC-A 192 Bd: 1028 msg (5lgs) to 'P6Z' Paris
13550.0	TAD	MFA Ankara, TUR	FEC-A 144 Bd: 0850 msg + msg (5lgs) to various embassies
	ZKLF	*Auckland Meteo, NZL*	*FAX // 5807.0 kHz $*
	'G8T'	French E Belgrade, SRB	FEC-A 192 Bd: 0908 msg (5lgs) after "BBBB" to 'P6Z' Paris
		MFA Bucharest, ROU	RUM-FEC 164 Bd: 0904 msg (Romanian nx)
13551.5	'RFGW'	MFA Paris, F	FEC-A 192 Bd: 0642 tfc, 0841 msgs (5lgs) to 'D2Z' Budapest, 1334 msg (5lgs), 1405 tfc to 'A9C' Bucharest
13556.0	'L4N'	French E Dakar, SEN	FEC-A 192 Bd: 1020 msgs (5lgs) to 'RFGW' Paris
		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1643 msg (Romanian nx)

13560.0	BMB	T'ai-pei Meteo, TAI	CW

13570.0 - 13600.0 **BROADCASTING** <SSB only, as from 01 April 2007>
FIXED + Mobile except aeronautical mobile (R) <534>

13570.9	DGN 57	PIAB Bonn, D	FEC-A 96 Bd: 0830-1030 G nx
13572.5	'RFFX'	MOD Paris, F	ARQ-E 72 Bd: 0608-1635 tfc or msgs or encrypted msg after "KKKK..." to 'RFFXL' Naqoura [XXL]
13576.0	SKM 25	Stockholm Air, S	SSB
13580.0	HMF 36	KCNA Pyongyang, KRE	ITA2 50 Bd: 0400-0600+0800-1000 E nx, 1145-1430 F nx, 2130-2300 E nx *FAX // 11476.0 kHz*
13585.9	CNM 85X11	MAP Rabat, MRC	1000-1130 F nx, 1200-1400 E nx, 1530-1700 F nx
13587.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1430 msg (Romanian nx)
13593.7	'RFFA'	MOD Paris, F	ARQ-E3 192 Bd: 0038 "controle de voie" to 'RFTJ' Dakar, 1152 tfc to 'RFTJ' [LFA]
13597.0	*JMH 4*	*Tokyo Meteo, J*	*FAX // 3622.5 kHz $*
13597.4	*IMB 56*	*Rome Meteo, I*	*FAX // 4777.5 kHz $*

13600.0 - 13800.0 **BROADCASTING**

13612.5		UNID teleprinter	100
13737.3	5YD	Nairobi Air, KEN	ITA2 50 Bd: 1154+1645+2116 ry
13766.0	*3MA*	*CNA T'ai-pei, TAI*	*FAX // 9430.0 kHz* CW
13780.0	HMF 35	KCNA Pyongyang, KRE	ITA2 50 Bd: 0400-0600 E nx, 0600-0830 R nx wca, 1000-1200 E nx, 1230-1430 R nx wca, 1500-1700 E nx
13784.0	GYA	RN London, G	ITA2 75 Bd: 0840 channel status

13800.0 - 13870.0 **BROADCASTING** <SSB only, as from 01 April 2007>
FIXED + Mobile except aeronautical mobile (R)

13808.0		UNID teleprinter	200
13813.5		UNID teleprinter	MFSK
13818.0		UNID teleprinter	75
13824.5	GYU	RN Gibraltar, GIB	Piccolo 6: 1012 test
13826.0	NNN 0ICE	USN MARS McM. Sd., ATA	SSB
13833.0	TAD	MFA Ankara, TUR	FEC-A 144 Bd: 0920 msg (5lgs) to Islamabad, 1200 msg (E nx), 1546 tfc
13835.0		USAF AWS Ceiba, PTR	ITA2 75 Bd: 1312+2100 wx
13836.0		UNID teleprinter	75
13839.0	GXQ	BA London, G	VFT: ITA2 50 Bd: 0643-1716 ryi

13839.7	'RFFA'	MOD Paris, F	ARQ-M2 200 Bd: A: 0754-1843 msgs + encrypted msgs after "KKKK..." to 'RFFVA' [FDZA] B: 0941-1555 msgs + msgs (5lgs) after "BBBB" to 'RFFVA' [FDZB]
13846.7	'RFVI'	FF Le Port, REU	ARQ-E3 100 Bd: 24 h msgs or svc msgs or msg (5lgs) or wx or encrypted tfc after "KKKK..." or "controle de voie" to 'RFFA' Paris or 'RFQP' Jibuti [RUN]
13848.5	'RFFXL'	FF Naqoura, LBN	ARQ-E 72 Bd: 0611-2057 "controle de voie" or tfc to 'RFFX' Paris [XZL]
13853.7		Laghouat Prefecture, ALG	Coquelet 8: 1238 msg to Ouargla
13855.0	*OXT*	*Copenhagen Meteo, DNK*	*FAX // 5850.0 kHz $*
			CW
		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1330 msgs

13870.0 - 14000.0 FIXED + Mobile except aeronautical mobile (R)

13875.8	HGX 41	Hungarian E Damascus, SYR	DUP-ARQ: 1200 msg (5lgs) + msg to HGX 21 Budapest, 1218 msg (5lgs) to HGX 21
13876.2	HGX 21	MFA Budapest, HNG	DUP-ARQ: 1200 + 1218 tfc to HGX 41 Damascus, 1250 tfc
13877.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 1155 msgs to Athens
		Polish E Athens, GRC	POL-ARQ 100 Bd: 0828 tfc to SNN 299 Warsaw, 1252 msgs to SNN 299
13880.0	MKK	RAF London, G	VFT: ITA2 50 Bd: 0753-2048 ryi
13882.5	*DDK 6*	*Hamburg Meteo, D*	*FAX // 3855.0 kHz $*
13886.7	'RFFA'	MOD Paris, F	ARQ-E3 192 Bd: 0753-1530 + 2113 tfc + operational msg + msg + msg (F nx) + msgs (5lgs) after "BBBB" to 'RFTJD' Libreville [IAH, ITF]
13887.0	TAD	MFA Ankara, TUR	FEC-A 144 Bd: 1646 msgs
13890.0	'6C2'	Czech E Lagos, NIG	ITA2 100 Bd: 1006 msg to OLZ Prague, final tfc, s. off
			CW
13893.5	DMK	MFA Bonn, D	ALIS: 1314 msgs to Cotonou
		German E Cotonou, BEN	ALIS: 1314 tfc to DMK Bonn
13894.0		UNID station (996)	ALIS-2 241 Bd: 1240 Turkish tfc
13897.0		German E Madrid, E	ARQ-E 96 Bd: 0922-1326 msg + encrypted msgs after "EEE..." to DMK Bonn
13900.0	*BMF*	*T'ai-pei Meteo, TAI*	*FAX // 4616.0 kHz $*
13907.5		UNO Basikounou, MTN	SITOR-A: 1721 msgs
13913.5	HBC 88	ICRC Geneva, SUI	PACTOR: 1123 + 1131 tfc
13917.0		Polish E Tripoli, LBY	POL-ARQ 100 Bd: 0637 + 0641 tfc to SNN 299 Warsaw, 1103 msgs to SNN 299, 1233 tfc to SNN 299
13920.0	*AXM 35*	*Melbourne Met., VIC, AUS*	*FAX // 2628.0 kHz $*
13927.0		many USAF MARS stations	SSB

13929.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 0820 s. on with ry, 0910 tfc
13933.0	'DOR'	MFA Sofia, BUL	ITA2 150 Bd: 0822-1120 msg (Bulgarian or E nx)
			ITA2 300 Bd: 0938 msg (E nx), 0945 msg (Bulgarian nx), 1229 encrypted tfc
13936.5	7RQ 20	MFA El Djaza'ir, ALG	Coquelet 8: 0756+1322+1415 tfc
		Djanet Prefecture, ALG	Coquelet 8: 1000 msg to 7RA 20 MOI El Djaza'ir
		Tamanrasset Prefecture, ALG	Coquelet 8: 0755 msgs to 7RA 20 MOI El Djaza'ir
13940.0	CLP 1	MFA Habana, CUB	ITA2 75 Bd: 1612 msg
13940.7	'RFFA'	MOD Paris, F	ARQ-E3 200 Bd: 0542-1515 msgs (5lgs) after "BBBB" to 'RFFVAT' Incirlik [AVA, FDX]
13942.0	SHG 83	Stockholm Air, S	SSB
13945.5		German E Brasilia, B	ARQ-E 96 Bd: 1834+1940+2151 tfc or msgs or encrypted msg to DMK Bonn
13947.0	*ROM 5*	*Tashkent Meteo, UZB*	*FAX // 3280.0 kHz $*
13948.0		UNID teleprinter	75
13951.0	HBD 20	MFA Berne, SUI	SITOR-A: 0955-1501 tfc or msg (F nx) or msg (5lgs)
13953.0	'P6Z'	MFA Paris, F	FEC-A 192 Bd: 0621-1751 tfc or msg (5lgs) after "BBBB" to 'A9C' Bucharest [REX]
13954.5	HBD 20	MFA Berne, SUI	SITOR-A: 0948 msg (G nx) + tfc to HBD 54 Ankara, 1000 tfc to HBD 54, 1257 msg (G nx), 1538 msg (5lgs) to HBD 46 Habana
	HBD 46	Swiss E Habana, CUB	SITOR-A: 1538 tfc to HBD 20 Berne
	HBD 54	Swiss E Ankara, TUR	SITOR-A: 0948 tfc to HBD 20 Berne, 1000 msg to HBD 20
13956.5		MFA Tunis, TUN	SITOR-B: 1004 tfc fm 'W5P' to 'BR3', 1315 clg + msg fm 'VBG' to '4U6', 1715 clg + msg fm 'TLU' to 'ZZI', 2112 msg (5lgs)
13957.0		Polish E Rabat, MRC	POL-ARQ 100 Bd: 1432 msg to SNN 299 Warsaw
13958.5	HBD 20	MFA Berne, SUI	SITOR-A: 0635-1533 tfc to HBD 47 Lisbon or tfc to HBD 71 Amman or msg (G nx) or msg (5lgs)
	HBD 47	Swiss E Lisbon, POR	SITOR-A: 0635+1245 msgs (5lgs) to HBD 20 Berne
	HBD 71	Swiss E Amman, JOR	SITOR-A: 0850 msg (5lgs) to HBD 20 Berne
13961.5	HBD 20	MFA Berne, SUI	SITOR-A: 0820-1721 tfc or msg (G/F press review) to HBD 23 Athens or HBD 58 Moscow
	HBD 23	Swiss E Athens, GRC	SITOR-A: 1030+1641 msgs to HBD 20 Berne
	HBD 58	Swiss E Moscow, RUS	SITOR-A: 1007 msg (5lgs) to HBD 20 Berne
13963.5	HBC 88	ICRC Geneva, SUI	PACTOR: 0431+1526+1544 tfc, 1618 tfc to Goma
			SITOR-A: 0622-1433 tfc or msg

13963.5		ICRC Goma, ZAI	PACTOR: 1618 msg (E REUTER nx) to HBC 88 Geneva
13965.0	HBC 88	ICRC Geneva, SUI	SSB
13965.5	HBD 20	MFA Berne, SUI	SITOR-A: 0735 tfc to HBD 52 Rabat, 1204 msg (5lgs) to HBD 46 Habana, 1328 msgs, 1421 msg (5lgs), 1530 msg
	HBD 46	Swiss E Habana, CUB	SITOR-A: 1204 tfc to HBD 20 Berne
	HBD 52	Swiss E Rabat, MRC	SITOR-A: 0735 msg to HBD 20 Berne, 1715 tfc to HBD 20
13966.5	HBC 88	ICRC Geneva, SUI	PACTOR: 0543-1752 tfc or msgs
	6TR 88	ICRC Khartoum, SDN	PACTOR: 1108 msgs to HBC 88 Geneva
		ICRC Tbilisi, GEO	PACTOR: 1042+1412 msg to HBC 88 Geneva
13974.2	ETC 88	ICRC Addis Ababa, ETH	PACTOR: 1245 msg to HBC 88 Geneva
	HBC 88	ICRC Geneva, SUI	PACTOR: 1245 tfc to ETC 88, 1615 tfc to 5ZR 88
	5ZR 88	ICRC Nairobi, KEN	PACTOR: 1615 msgs to HBC 88
		ICRC Baghdad, IRQ	PACTOR: 1145 msg to HBC 88 Geneva
13975.0		Polish E Rabat, MRC	POL-ARQ 100 Bd: 1320 msg to SNN 299 Warsaw
13976.0	HBD 20	MFA Berne, SUI	SITOR-A: 0622-1710 tfc or msg (G/F nx) to HBD 46 Habana or HBD 61 Cairo
	HBD 46	Swiss E Habana, CUB	1455 tfc to HBD 20 Berne
	HBD 61	Swiss E Cairo, EGY	SITOR-A: 1238 msg (5lgs) to HBD 20 Berne
13977.7	'RFFA'	MOD Paris, F	ARQ-M2 200 Bd: A: 0829-1904 tfc or "controle de voie" to 'RFQP' Jibuti [RQF]
13986.7	'RFFA'	MOD Paris, F	ARQ-E3 192 Bd: 0544-2047 "controle de voie" or tfc or msg [IGU]
13988.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 1150 msg + tfc to Cairo, 1423 msgs
		Polish E Cairo, EGY	POL-ARQ 100 Bd: 1155 msgs to SNN 299 Warsaw
13989.8		UNID teleprinter	100
13990.3		UNID teleprinter	192
13994.7		UNID teleprinter	192
13996.5	STK	Khartoum Air, SDN	ITA2 50 Bd: 0432-2334 ry or msgs [SKA]
13998.0	HBC 88	ICRC Geneva, SUI	PACTOR: 0746-1645 tfc or msgs or tfc to 5ZR 88 Nairobi or Kinshasa
	5ZR 88	ICRC Nairobi, KEN	PACTOR: 0746 msg to HBC 88 Geneva
		ICRC Kinshasa, ZAI	PACTOR: 0958+1439 msgs to HBC 88 Geneva
13998.5		UNID teleprinter	MFSK 12

14000.0 - 14250.0 AMATEUR + AMATEUR-SATELLITE <510>

14043.7		MFA Cairo, EGY	SITOR-A: 1010 ATU-A msg

14050.0		Goma, ZAI	SITOR-A: 1730 tfc
14119.8		UNID teleprinter	81
14126.6		UNID teleprinter	144
14171.0	RDL	Smolensk, RUS	CW
14180.0		UNID teleprinter	50
14250.0 - 14350.0		**AMATEUR** <510 535>	
14291.7		MFA Islamabad, PAK	TWINPLEX YYBB BYBY: SITOR-A: 1500 msgs
14295.0	'MLOP'	Somali E Stockholm, S	SITOR-A: 1150 tfc to Muqdisho
14322.0	'MLOP'	Somali E Stockholm, S	SITOR-A: 1050 tfc to Muqdisho
14325.6		UNID teleprinter	144
14331.0	'MLOP'	Somali E Stockholm, S	SITOR-A: 0637-1830 tfc to Muqdisho
14340.0	BAF 47	Beijing Meteo, CHN	ITA2 50 Bd: 2140-1051 wx
14350.0 - 14990.0		**FIXED + Mobile except aeronautical mobile (R)**	
14352.0	NKW	USN Diego Garcia, DGA	COMB
14354.9	SAM	MFA Stockholm, S	SWED-ARQ: 1426 tfc, 1500 msg to Mexico City, 1710 msgs
	SAM ..	Swedish E Mexico City, MEX	SWED-ARQ: 1500 tfc to SAM Stockholm
14356.0	GFL 24	Bracknell Meteo, G	ITA2 75 Bd: 24 h ry or wx
14359.0	SNN 299	MFA Warsaw, POL	ITA2 75 Bd: 0605-1717 ry or msgs or msgs (5fgs) to European embassies CW
14362.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 1034 msg, final tfc, s. off
		Czech E Kiyev, UKR	ITA2 100 Bd: 1046 msg to OLZ Prague
14365.0	'AMADO'	UNID station (896)	G-TOR: 0820 tfc
14365.5		PSF Kinshasa, ZAI	G-TOR: 1000 S tfc regarding "fax a farmaceuticos mundi"
14365.7		TALEBAN Jalalabad, AFG	SITOR-A: 0404 msg to Quetta
		TALEBAN Kabul, AFG	SITOR-A: 0427 tfc to Quetta
		TALEBAN Mary, TKM	SITOR-A: 0522 msg + tfc to Quetta
		TALEBAN Quetta, PAK	SITOR-A: 0404-0522 tfc to Jalalabad or Kabul or Mary
14367.0	*BAF 8*	*Beijing Meteo, CHN*	*FAX // 5527.0 kHz $*
14373.2	CCS	CN Santiago, CHL	ITA2 100 Bd: 0100 msg (5lgs) to CCMP
14373.5	HBC 88	ICRC Geneva, SUI	PACTOR: 0715 tfc to 6TR 88 Khartoum
	6TR 88	ICRC Khartoum, SDN	PACTOR: 0715 msg to HBC 88 Geneva
14377.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 0827-1423 ry or tfc or msg (Bulgarian nx) or encrypted msg after "DDDD..."
14379.5	'C37A'	MOSSAD Tel Aviv, ISR	ARQ-E 288 Bd: 1040 encrypted tfc to '6XM8' BNDVB Bonn ITA2 100 Bd: 1354 tfc to '6XM8' BNDVB Bonn
14381.0	GXQ	BA London, G	VFT: ITA2 50 Bd: 0455-2022 ryi
14382.0		Lagos, NIG	SSB

14385.0	'2D6'	Czech E Tehran, IRN	ITA2 100 Bd: 1109 msgs to OLZ Prague
14386.5	'C37A'	MOSSAD Tel Aviv, ISR	ITA2 100 Bd: 1953 clg '6XM8' BNDVB Bonn
14387.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 0849-1654 msg or msg (Bulgarian nx) or tfc to Tripoli
14389.0		UNID teleprinter	CIS 10-11-11 MFSK
14390.5	'C37A'	MOSSAD Tel Aviv, ISR	ARQ-E 288 Bd: 1446+1528 encrypted tfc to '6XM8' BNDVB Bonn
14391.5		many USN MARS stations	SSB
14399.0		UNID teleprinter	CIS 10-11-11 MFSK
14401.0		Slovak E Jakarta, INS	ITA2 100 Bd: 1541 msgs + tfc to OMS Bratislava
14402.0		DOSC Moscow, RUS	CIS 10-11-11 MFSK: 1406 msg (5lgs)
14402.5	MKD	RAF Akrotiri, CYP	Piccolo 6: 1238 tfc to MUH
14405.0	4UZ	UNO Geneva, SUI	PACTOR: 0609-1930 tfc or msgs to Monrovia or Tbilisi
		UNO Monrovia, LBR	PACTOR: 1550 tfc to 4UZ Geneva
14405.9	SAM	MFA Stockholm, S	SWED-ARQ: 0900-1323 tfc or msgs to SAM 20 Athens or SAM 25 Damascus
	SAM 20	Swedish E Athens, GRC	SWED-ARQ: 1250 msg to SAM Stockholm
	SAM 25	Swedish E Damascus, SYR	SWED-ARQ: 1323 msg to SAM Stockholm
14415.0		many USN MARS stations	SSB
14416.0		UNID teleprinter	CIS 10-11-11 MFSK
14428.0		UNID teleprinter	81
14432.5	MKK	RAF London, G	VFT: ITA2 50 Bd: 1609 ryi
14436.0	*GFE 23*	*Bracknell Meteo, G*	*FAX // 2618.5 kHz $*
14438.2	FJY 2	DTRE Port-aux-Francais, KER	ARQ-E3 96 Bd: 0620-1056 msgs to 'P6Z' Paris
14441.5		many USN MARS stations	SSB
14445.0	MKK	RAF London, G	VFT: ITA2 50 Bd: 0454-2125 ryi
14445.7		MFA Cairo, EGY	SITOR-A: 1210 ATU-A tfc
14447.0	'WJI'	SISMI Udine, I	ARQ-E 96 Bd: 0722 msg (5lgs) to 'CJL' MOSSAD Tel Aviv, 1140 msg (5lgs) + final tfc "have a nice day" to 'CJL'
14448.0		Polish E Ottawa, ONT, CAN	POL-ARQ 100 Bd: 1343 msgs to SNN 299 Warsaw
14449.5	CLP 1	MFA Habana, CUB	ITA2 100 Bd: 0855+1415 msg (S nx)
14451.7		MFA Cairo, EGY	SITOR-A: 1424 clg Rome. 1515 ATU-A msg to Rome, 1549 tfc
14452.0	HMF 57	KCNA Pyongyang, KRE	ITA2 50 Bd: 0800-1000 E nx, 1145-1430 F nx
14452.5	VXV 9	CFARS Golan Heights, SYR	SSB
14455.0	VHC	RAN Canberra, ACT, AUS	Piccolo: 0100 msgs to GFH Kai Tak, 1055+1300 tfc
14457.6		UNID teleprinter	96
14458.5	DGO 46L2	PIAB Bonn, D	FEC-A 96 Bd: 1500-1700 G nx
14460.5	MKD	RAF Akrotiri, CYP	Piccolo 6: 1628 tfc to '44'
14461.7		Pakistan E Moscow, RUS	SITOR-A: 0922 msg (5lgs) + msg to Islamabad

14462.0	'P6Z'	MFA Paris, F	ARQ6-90 200 Bd: 1324 msgs to Conakry
14462.5	TNL	ASECNA Brazzaville, COG	ITA2 100 Bd: 1138 + 1247 + 1535 msg
14467.0		many USN MARS stations	SSB
14467.2		UNID FF station (1195)	ARQ-E3 192 Bd: 1545 msg
14467.3	DDH 8	Hamburg Meteo, D	ITA2 50 Bd: 0704-1553 + 1933 ry or wx
14470.0		many USN MARS stations	SSB
14473.0		UNID teleprinter	200
14475.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1000 msgs to Helsinki
14476.1		MFA Brussels, BEL	VFT: ITA2 107 Bd: 1030 msgs + msg (5lgs) to Beirut
14478.0		Czech E Tripoli, LBY	IRA-ARQ 200 Bd: 1200 msgs to OLZ Prague
14478.5	OEC	MFA Vienna, AUT	SI-ARQ 96 Bd: 6 characters: 0556-2120 tfc or msgs to Amman or Moscow or Tehran or OEC 44 Tel Aviv or OEC 72 Lisbon
	OEC 44	Austrian E Tel Aviv, ISR	SI-ARQ 96 Bd: 6 characters: 1048 + 1200 msgs + tfc to OEC Vienna
	OEC 72	Austrian E Lisbon, POR	SI-ARQ 96 Bd: 6 characters: 1440 msgs to OEC Vienna
	OEC ..	Austrian E Amman, JOR	SI-ARQ 96 Bd: 6 characters: 1130 + 1305 tfc to OEC
	OEC ..	Austrian E Moscow, RUS	SI-ARQ 96 Bd: 6 characters: 0954 + 1154 msg (5lgs) to OEC Vienna
	OEC ..	Austrian E Tehran, IRN	SI-ARQ 96 Bd: 6 characters: 0908 tfc to OEC Vienna
14481.7	'RFTJ'	FF Dakar, SEN	ARQ-E3 48 Bd: 24 h "controle de voie" or tfc or msg or msg (5lgs) after "BBBB" to 'RFTJF' Port Bouet [TJF]
14486.0	'P6Z'	MFA Paris, F	FEC-A 192 Bd: 0639 + 0653 tfc, 1045 + 1420 msg (5lgs), 1529 clg + tfc to 'J5W' Rabat
14487.2	'RFFP'	MOD Paris, F	ARQ-E3 200 Bd: 0649-2015 tfc to 'RFFVAY' Sarajevo [FDXA]
14497.5	CSY	Santa Maria Air, AZR	ITA2 50 Bd: 24 h ry or msgs [MCA]
14501.5		MFA Jakarta, INS	ITA2 50 Bd: 0050 msg (5lgs), 0103 tfc
14501.7	KNY 29	Egyptian E Washington, DC, USA	SITOR-A: 1939 msg (5lgs) to Cairo
		Egyptian E Belgrade, SRB	SITOR-A: 1420 ATU-A msg to Cairo, final tfc, s. off
		Egyptian E Rabat, MRC	SITOR-A: 1337 + 1644 msg (5lgs) to Cairo
		MFA Cairo, EGY	SITOR-A: 1432-1732 tfc or ATU-A msg or msg (5lgs)
14502.5	MKK	RAF London, G	Piccolo 6: 1815 + 2005 operational tfc
14506.7		Egyptian E Abu Dhabi, UAE	SITOR-A: 0632 ATU-A msg + final tfc to Cairo, s. off; 1038 ATU-A tfc to Cairo

14508.0	'P6Z'	MFA Paris, F	ARQ6-90 200 Bd: 1145 final tfc, s. off; 1647 msg (5lgs) to 'DKAR' Dakar
14510.3	CLP 1	MFA Habana, CUB	ITA2 50 Bd: 1943 ry
14518.0	OEC	MFA Vienna, AUT	SI-ARQ 96 Bd: 5 or 6 characters: 0750-1145 tfc or msg or msg (E nx) or msg (G nx) to various embassies
14521.0		Romanian E Amman, JOR	RUM-FEC 218 Bd: 1130 msgs to Bucharest
		Romanian E Cairo, EGY	RUM-FEC 218 Bd: 1543 msg to Bucharest, 1650 encrypted msg
14522.8		MFA Bucharest, ROU	RUM-FEC 218 Bd: 1525 encrypted tfc
14526.0		VoA Greenvl. fdr., NC, USA	ISB
14530.0	'P6Z'	MFA Paris, F	ARQ6-90 200 Bd: 0930 msg (5lgs) to Niamey [XNMY], 1440 tfc
14535.0	'U3H'	French E Moscow, RUS	FEC-A 192 Bd: 1405 msg to 'P6Z' Paris
		UNID station (196)	CIS-14 96 Bd: A/B: 0633+0743+0813+1310 R tfc wca
14535.5	GYU	RN Gibraltar, GIB	Piccolo 6: 1244 tfc
14540.0	'O6P'	French E Riyadh, ARS	FEC-A 192 Bd: 1055 msg (5lgs) after "BBBB" to 'RFGW' Paris
14542.0	'O9B'	French E Cairo, EGY	FEC-A 192 Bd: 0931 msg (5lgs) to 'RFGW' Paris, 1105 msgs to 'RFGW'
14543.7		MFA Cairo, EGY	SITOR-A: 0934 msg (5lgs) + ATU-A tfc
14545.0		French E Islamabad, PAK	FEC-A 192 Bd: 1130 msg (5lgs) to 'P6Z' Paris
		French E Tel Aviv, ISR	FEC-A 192 Bd: 0740 final tfc to 'P6Z' Paris, s. off
14546.7	'141'	USA Dhahran, ARS	HARCO-39 MFSK 200 Bd: 1956 msgs + tfc to Ramstein
14550.5	MKD	RAF Akrotiri, CYP	Piccolo 6: 1519 operational tfc
14550.9	MKD	RAF Akrotiri, CYP	Piccolo 6: 1330-1520 encrypted tfc
14556.7	'701'	UNID station (696)	Packet Radio: 1353 clg '971'
14560.0	JYF 2	PETRA Amman, JOR	ITA2 50 Bd: 0800 E nx, 0900+1000+1100 A nx
14561.7		MFA Islamabad, PAK	SITOR-A: 1220 msgs to Moscow
14564.0	5BC 68	Nicosia R, CYP	SSB QSX 16442.0 kHz
		UNID teleprinter	MFSK
		UNID teleprinter	81
14568.0	HMF 32	KCNA Pyongyang, KRE	ITA2 50 Bd: 0400-0600+1000-1100 E nx
14573.0		JANA Tripoli, LBY	ITA2 50 Bd: 0700-1900 A nx
14575.0	'P6Z'	MFA Paris, F	FEC-A 192 Bd: 1414 clg 'F9S' Prague
	'RFGW'	MFA Paris, F	FEC-A 192 Bd: 0828-1312 clg 'G8T' Belgrade or msgs (5lgs) after "BBBB" to 'G8T' or tfc or msgs (5lgs) to various embassies [REX]
14578.0	'RFFXL'	FF Naqoura, LBN	ARQ-E 72 Bd: 0732-2230 ry or msg to 'RFFX' Paris [XZL]
14584.0	OLZ 24	Mongolian E Prague, CZE	ITA2 75 Bd: 0652 msg to JTF 23 Ulan Bator, 0710 clg JTF 23

14585.7	'RFPTC'	FF N'djamena, TCD	ARQ-E3 200 Bd: A: 0906-1918 "controle de voie" or operational tfc or tfc or encrypted tfc or msg (5lgs) after "BBBB" to 'RFFA' Paris
14586.0	JTF 23	MFA Ulan Bator, MNG	ITA2 50 Bd: 0840+0928 clg OLZ 24 Prague, 1010 clg + tfc + msg (5fgs) to OLZ 24
14594.0		UNID teleprinter	MFSK 12
14598.0		UNID teleprinter	300
14598.2	'RFFA'	MOD Paris, F	ARQ-M2 200 Bd: A: 0757-1912 "controle de voie" or tfc or msg (5lgs)
14600.0		LOMAC Maputo, MOZ	SITOR-A: 0905 E commercial msg regarding "firm delivery from supplier in Zimbabwe" signed "simone"
14606.7	'RFHI'	FF Noumea, NCL	ARQ-E3 100 Bd: 0943 "controle de voie", 1141 tfc
14608.0	GFH	RAF Kai Tak, HKG	Piccolo: 0103+0221+0407+1038 tfc
	PWB	BN Belem, B	ITA2 75 Bd: 1010 msgs + tfc to PWN Natal
	PWN	BN Natal, B	ITA2 75 Bd: 0907 tfc "fm coco", 1310 tfc, 1931 clg PWES
14612.0	PWX	BN Brasilia, B	ITA2 75 Bd: 1021 ry, 2009 clg LOL Buenos Aires
14613.7	FVA 80	Rosny sur Bois Gendarmerie, F	SITOR-A: 1412 tfc; 1445+1535 tfc to FVI 90 Beirut
	FVI 90	Beirut Gendarmerie, LBN	SITOR-A: 1445 msgs to FVA 80 Rosny sur Bois, 1555 final tfc to FVA 80
		Egyptian E Rome, I	SITOR-A: 1039 ATU-A msgs to Cairo
14614.5	DMK	MFA Bonn, D	ALIS: 1301 tfc
14615.0	AFE 83	USAF Wideawake, ASC	SSB
14621.7		MFA Cairo, EGY	SITOR-A: 1043-1525 msg (ATU-A nx) or ATU-A msg
14626.7	'RFLI'	FF Fort de France, MRT	ARQ-E3 192 Bd: 24 h "controle de voie" or encrypted msg after "KKKK..." to 'RFTJ' Dakar [LIJ]
14639.0		KPL Vientiane, LAO	ITA2 50 Bd: 0800+0900 E nx
		Polish E Baghdad, IRQ	POL-ARQ 100 Bd: 1345 msg to SNN 299 Warsaw
14641.0	EBA	SN Madrid, E	CW
14642.0	4UZ	UNO Geneva, SUI	SITOR-A: 0725-1707 msg
		UNID teleprinter	CIS 10-11-11 MFSK
14643.7	4UK	UNO Khartoum, SDN	TWINPLEX BBYY BYBY: SITOR-A: 0557-1500 tfc to 4UZ Geneva
	4UZ	UNO Geneva, SUI	PACTOR: 0424 tfc to Cox's Bazar, 0522 tfc to Jaffna, 0813 tfc to Dire Dawa
			TWINPLEX BBYY BYBY: SITOR-A: 0557-1500 msgs to 4UK Khartoum
		UNO Cox's Bazar, BGD	PACTOR: 0424 tfc to 4UZ Geneva
		UNO Dire Dawa, ETH	PACTOR: 0813 msgs + tfc to 4UZ Geneva

14643.7		UNO Jaffna, SLK	PACTOR: 0522 msg to 4UZ Geneva
14645.7		Egyptian E Khartoum, SDN	SITOR-A: 0638+0656+0900+1548-1940 ATU-A tfc or msgs to Cairo
14646.0		UNID teleprinter	81
14647.5		UNID teleprinter	100
14648.0		DOSC Moscow, RUS	CIS 10-11-11 MFSK: 1130 msg (5lgs)
14650.0		UNID teleprinter	100
14654.5	SPW	Warsaw R, POL	SITOR-A: 0354-2019 tts
			SITOR-B: 0000+0200+0400+0600+0800+1000+1200+1400+1600+1800+2000+2200 tfc list
			CW
14656.0	SPW	Warsaw R, POL	SSB
14661.0	'P6Z'	MFA Paris, F	ARQ6-90 200 Bd: 0730 msg (5lgs), 0825 tfc
14663.5	DMK	MFA Bonn, D	ALIS: 1038 tfc, 1120 encrypted msgs after "VVV..." to Cairo, 1331 tfc
			ARQ-E 96 Bd: 0820-2311 tfc or operational tfc "fuer fs-stelle, lbr. struppi, bitte db nr 520 wiederholen, kam hier unvollstaendig an, gruss dieter" or msgs to Beijing or Brasilia or Lima
		German E Cairo, EGY	ALIS: 1120 tfc to DMK Bonn
14670.0	CHU	Ottawa TS, ONT, CAN	CW/SSB
14670.2	'RFFVAT'	FF Incirlik, TUR	ARQ-E3 200 Bd: 0637-2114 msg (5lgs) after "BBBB" to 'RFFVH' Paris [FKW4]
14674.0	'DFZG'	MFA Belgrade, SRB	ITA2 75 Bd: 0538-1535 ry or msg or encrypted msg after "XAXAXA..." or "XCXCXC..." or "XTXTXT..." or msg (E or Serbian nx) or tfc to Baghdad
14677.5		UNID teleprinter	MFSK
14678.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 0908 tfc, 0955 msg (5lgs) to Madrid
14681.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 0706-2122 msg (Romanian nx) or encrypted tfc
			CW
14685.0	*3MA 25*	*CNA T'ai-pei, TAI*	*FAX // 9430.0 kHz*
			CW
14686.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 0553-1508 tfc
14690.5	GYU	RN Gibraltar, GIB	ITA2 75 Bd: 1752 ry
			Piccolo 6: 1540-1715 msgs + tfc to + clg MKD Akrotiri
14692.5	*JMJ 4*	*Tokyo Meteo, J*	*FAX // 3365.0 kHz $*
14699.0	YIX 70	INA Baghdad, IRQ	ITA2 50 Bd: 0500-1800 A nx
14700.0	ZLK 46	USN Christchurch, NZL	SSB
14705.0	GFH	RAF Kai Tak, HKG	Piccolo: 0010+0820+1800 operational tfc or msgs to VHC Canberra
14707.0	JPA 35	INTERPOL Tokyo, J	SITOR-A: 0700 msgs (5lgs) + encrypted msg

14710.0	OEC	MFA Vienna, AUT	SI-ARQ 96 Bd: 6 characters: 1210 msg (G nx), 1305 tfc
14715.0		UNID teleprinter	CIS 10-11-11 MFSK
14718.3	'RFHI'	FF Noumea, NCL	ARQ-E3 100 Bd: 0210+0402 msg to 'RFHJ' Papeete, 0902+0910+1236 tfc to 'RFHJ' [HIJ]
14732.0	'RFVI'	FF Le Port, REU	ARQ-E 96 Bd: 0637-1622 msg or msg (5lgs) after "BBBB" to 'RFVITT' Dzaoudzi [ITT]
14734.0		Polish E El Djaza'ir, ALG	POL-ARQ 100 Bd: 0955+1231 msg to SNN 299 Warsaw
14735.0		Bulgarian E Helsinki, FIN	ITA2 75 Bd: 1155 msg to 'DOR' Sofia
14742.7		Egyptian E Doha, QAT	SITOR-A: 0831 ATU-A msg to Cairo
14752.0		UNID teleprinter	200
14761.5	NNN 0GKF	USN MARS Nazareth, PA, USA	SITOR-A: 1330 msg to NNN 0CYH, 1650 msg to NNN 0XHD, 1806 tfc to NNN 0CTY, 2112+2130 msgs
	NNN 0MDA	USN MARS M., NH, USA	PACTOR: 1404-1703 tfc or msgs
14764.0	A9M 70	GNA Manama, BHR	ITA2 75 Bd: 0500-1500 A nx, 1500-1700 E nx, 1700-2100 A nx
14770.0		UNID station (896)	CIS-14 96 Bd: A/B: 1048 R msgs wca
14772.0		UNID teleprinter	MFSK
14774.6	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 0945 msg (Bulgarian nx)
14780.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 0948 msg (Bulgarian nx)
14781.5	'CJL'	MOSSAD Tel Aviv, ISR	ARQ-E 96 Bd: 0800 tfc to 'WJI' SISMI Udine, 1128 tfc "i am very sorry i have tech problems pls as as as as as tks a lot pls try to send *somthing*" to 'WJI', 1139 msg (5lgs) to 'WJI' ITA2 100 Bd: 0800 ry, 1510 tfc "we worked hard today" to 'WJI' SISMI Udine
14782.0	PWX	BN Brasilia, B	ITA2 75 Bd: 1310+1315 clg 'RPFN' Lisbon
14783.5		UNID teleprinter	100
14784.0		Polish E Bangkok, THA	POL-ARQ 100 Bd: 1021+1320 msgs to SNN 299 Warsaw
14787.0		UNID teleprinter	MFSK
14795.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 0822 schedule
14798.7	'RFFVAE'	FF Dhahran, ARS	ARQ-E3 200 Bd: 0436-1650 tfc or msgs to 'RFFA' Paris [DET]
14799.3	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 0827 schedule
14801.7	'RFVI'	FF Le Port, REU	ARQ-E3 100 Bd: 24 h "controle de voie" or tfc or msgs [VII]
14806.0		UNID teleprinter	CIS 10-11-11 MFSK
14812.0	OLZ	MFA Prague, CZE	ITA2 100 Bd: 0712+1203+1316+1346 msg
14814.4	SAM	MFA Stockholm, S	SWED-ARQ: 0710-1600 tfc or msg or msg (5lgs) to various embassies
	SAM 38	Swedish E Sofia, BUL	SWED-ARQ: 1051 tfc to SAM Stockholm

14814.4	SAM 45	Swedish E Ankara, TUR	SWED-ARQ: 1308 msgs to SAM Stockholm
	SAM 78	Swedish E Tunis, TUN	SWED-ARQ: 1209 msg (5lgs) after "SSSLLLSSSLLLSSSLLL" to SAM Stockholm
14817.5	JPA	INTERPOL Tokyo, J	SITOR-A: 0100+0700 encrypted msgs
14818.5		many USN MARS stations	SSB
14821.7		Egyptian E Islamabad, PAK	SITOR-A: 0840 msg (5lgs) to Cairo
14830.0		UNID teleprinter	ITA2 75 Bd encrypted
14836.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 0900 msg
14840.0	'DOR'	MFA Sofia, BUL	ITA2 150 Bd: 1041 msg (E nx)
14840.5	HGX 21	MFA Budapest, HNG	DUP-ARQ: 0845+1019 tfc to HGX 55 El Djaza'ir, 1352 msgs to HGX 56 Cairo DUP-FEC: 0613 tfc
14840.8	HGX 41	Hungarian E Damascus, SYR	DUP-ARQ: 1545 msg (5lgs) to HGX 21 Budapest
	HGX 55	Hungarian E El Djaza'ir, ALG	DUP-ARQ: 0845 tfc to HGX 21 Budapest, 0958 msg to HGX 21, 1019 msgs (5lgs) to HGX 21
	HGX 56	Hungarian E Cairo, EGY	DUP-ARQ: 1352 tfc + msgs to HGX 21 Budapest
14847.0	AXD	RAAF Laverton, VIC, AUS	COMB
14851.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 0822 schedule, 0832 msg (Bulgarian nx)
14855.0	MKD	RAF Akrotiri, CYP	VFT: ITA2 50 Bd: 0258+0810-2150 ryi
	'DOR'	MFA Sofia, BUL	ITA2 150 Bd: 0822 schedule
14863.0	TAD	MFA Ankara, TUR	FEC-A 144 Bd: 1000 msg (E nx) + msgs (5lgs)
14867.0	TAD	MFA Ankara, TUR	FEC-A 144 Bd: 0951 msg (5lgs)
14867.7		MFA Cairo, EGY	SITOR-A: 1605+1652 ATU-A msg
14886.0		French E Lagos, NIG	ARQ6-90 200 Bd: 1620 msgs to 'P6Z' Paris [LGSX]
14889.7		Egyptian E Doha, QAT	SITOR-A: 0823+1548 ATU-A msgs to Cairo
14890.0	GKX	Portishead Air, G	SSB
14892.0		UNID teleprinter	300
14901.7		MFA Cairo, EGY	SITOR-A: 0738+0756 tfc, 0930 msgs
14903.0		Polish E Tehran, IRN	POL-ARQ 100 Bd: 1235 msgs to SNN 299 Warsaw
14912.0	'DFZG'	MFA Belgrade, SRB	ITA2 75 Bd: 0825-1600 ry or msg (E or Serbian nx) or encrypted msg after "CHCHCH..." or "XYXYXY..." FEC-A 144 Bd: 1119 final tfc, s. off, 1228 encrypted msgs
14912.5	SOO 291	PAP Warsaw, POL	SITOR-B: 1400+1800 Polish nx
14925.7	'RFHJ'	FF Papeete, Tahiti, OCE	ARQ-E3 100 Bd: 1050 tfc, 1247 "controle de voie", 1454 tfc
14926.7	'RFTJ'	FF Dakar, SEN	ARQ-E3 192 Bd: 0456-2111 msgs or msg (F nx) or msg (5fgs) or "controle de voie" to 'RFTJD' Libreville [TJD]
14930.0	6MK 56	YONHAP Soul, KOR	CW
14935.5	NNN 0MDC	USN MARS C., MD, USA	PACTOR: 1550 msgs

14943.7		MFA Cairo, EGY	SITOR-A: 0556-1626 tfc or ATU-A msg or clg Addis Ababa or ATU-A tfc + msg (5lgs) to Addis Ababa or msg (E press review) to various embassies
14950.0	RWM 79	R Moscow feeder, RUS	SSB
14959.0	TAD	MFA Ankara, TUR	FEC-A 144 Bd: 0940 msg (E nx), 1155 msg (Turkish nx) + clg TAD 83
		Turkish E Bonn, D	FEC-A 144 Bd: 0856 msgs to TAD Ankara
		Turkish E Khartoum, SDN	FEC-A 144 Bd: 1035 msg to TAD Ankara
		Turkish E Tehran, IRN	FEC-A 144 Bd: 1220 msgs to TAD Ankara
14959.7	'RFTJ'	FF Dakar, SEN	ARQ-E3 192 Bd: 0700-2233 "controle de voie" or tfc [TJI]
14961.7		Egyptian E Moscow, RUS	SITOR-A: 1304 ATU-A msgs to Cairo
14963.0	TAD	MFA Ankara, TUR	FEC-A 144 Bd: 0705 msgs, 0900 msg (5lgs), 1047 + 1532 msgs
14964.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 2011 msg (Bulgarian nx)
14965.5	NKW	USN Diego Garcia, DGA	COMB
14966.7		Egyptian E Moscow, RUS	SITOR-A: 0810-1342 ATU-A tfc or msgs to Cairo SITOR-B: 0803 final tfc to Cairo, s. off; 1329 tfc to Cairo, 1405 msg to Cairo
14970.9	SAM	MFA Stockholm, S	SWED-ARQ: 0627-1557 tfc or msgs (5lgs) to various embassies
	SAM 50	Swedish E Cairo, EGY	SWED-ARQ: 0900 msgs to SAM Stockholm
14971.7		Egyptian E Moscow, RUS	SITOR-A: 1425 ATU-A msgs to Cairo
14975.0	'P6Z'	MFA Paris, F	FEC-A 144 Bd: 0622-2348 ry or clg 'J5W' Rabat or tfc or msgs
	'RFGW'	MFA Paris, F	FEC-A 192 Bd: 1455 msg (5lgs)
14978.0	OLX	Prague, CZE	CW
		UNID teleprinter	75
14980.0	'RAU'	UNID SOUD station (196)	ITA2 75 Bd: 1410 tfc
14981.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 1140 msg to Athens, 1400 msg (Bulgarian nx)
14982.5	*RBV 76*	*Tashkent Meteo, UZB*	*FAX // 3690.0 kHz $*
14985.0	ZEN 69	HKTI Victoria Island, HKG	ARQ-M4 192 Bd: A: 0715 clg Vientiane, 0800 to Vientiane, 1214 tfc [HVT]
14986.0		UNID teleprinter	75
14986.7		Egyptian E Asmara, ERI	SITOR-A: 0656-1607 ATU-A msgs to Cairo
14987.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 1530 msg (Bulgarian nx)

14990.0 - 15005.0 STANDARD FREQUENCY AND TIME SIGNAL <501>

14990.7		MFA Islamabad, PAK	TWINPLEX YYBB BYBY: SITOR-A: 1027 tfc
14991.7		MFA Cairo, EGY	SITOR-A: 0757-1520 tfc or ATU-A tfc or ATU-A msg

14993.0	WORLDWIDE	MSV SAR OPERATIONS FREQ.	SSB
	TAD	**MFA Ankara, TUR**	**FEC-A 144 Bd: 0938 msg + msg (5lgs), 1053 msg to TAD 46**
14996.0	RWM	Moscow TS, RUS	CW
15000.0	ATA	Delhi TS, IND	SSB
	BPM	Xi'an TS, CHN	CW/SSB
	BSF	T'ai-pei TS, TAI	CW/SSB
	LOL 3	AN Buenos Aires TS, ARG	CW/SSB
	RTA	Novosibirsk TS, SW, RUS	CW
	WWV	Fort Collins TS, CO, USA	COMB
	WWVH	Kihei TS, Maui Island, HWA	COMB
15004.0	RID	Irkutsk TS, SE, RUS	CW

15005.0 - 15010.0 STANDARD FREQUENCY AND TIME SIGNAL + Space Research

15010.0 - 15100.0 AERONAUTICAL MOBILE (OR)

15010.0		AMS	SSB
	AFA	USAF Andrews, MD, USA	
15013.0		AMS	SSB
	4XZ	IN Haifa, ISR	CW
15016.0		AMS	SSB
	AFA	USAF Andrews, MD, USA	
	AFE	USAF MacDill, FL, USA	
	AFE 83	USAF Wideawake, ASC	
	AFH	USAF A. AFB, Balboa, PNR	
	AFI	USAF McClellan, CA, USA	
	AFS	USAF Offutt AFB, NE, USA	
	AIF	USAF Yokota, J	
	AJE	USAF Croughton, G	
	AJO	USAF Adana, TUR	
	AKA	USAF Elmendorf AFB, ALS	
	AXF	RAAF Sydney, NSW, AUS	
	AXI	RAAF Darwin, NT, AUS	
	CUW	PAF/USAF Lajes AFB, AZR	
15016.7		**Egyptian E Safat, KWT**	**SITOR-A: 0439 + 0950 + 1207 msgs to Cairo**
15019.0		AMS	SSB
15021.0		**UNID teleprinter**	**60**
15021.7		**Egyptian E Moscow, RUS**	**SITOR-A: 0924 ATU-A msgs to Cairo**
15022.0		AMS	SSB
15025.0		AMS	SSB
15026.0		ANI Patriot Hills, ATA	SSB
		ANI Puntas Arenas, CHL	SSB
15028.0		AMS	SSB
15031.0		AMS	SSB
15034.0		AMS	SSB
	CHR	CF Trenton, ONT, CAN	
	CJX	CF St. John's, NFLD, CAN	
	VXA	CF Edmonton, ALTA, CAN	
15037.0		AMS	SSB
15040.0		AMS	SSB
15043.0		AMS	SSB
	AFE	USAF MacDill, FL, USA	
15043.7		**MFA Cairo, EGY**	**SITOR-A: 1301-1725 ATU-A msgs**

15046.0		AMS	SSB
	HEE 70	Berne Air, SUI	
15049.0		AMS	SSB
15052.0		AMS	SSB
15055.0		AMS	SSB
15058.0		AMS	SSB
		UNID teleprinter	75
15061.0		AMS	SSB
15064.0		AMS	SSB
15067.0		AMS	SSB
15070.0		AMS	SSB
15073.0		AMS	SSB
15076.0		AMS	SSB
15079.0		AMS	SSB
15082.0		AMS	SSB
15085.0		AMS	SSB
15088.0		AMS	SSB
15091.0		AMS	SSB
15094.0		AMS	SSB
15097.0		AMS	SSB

15100.0 - 15600.0 BROADCASTING

15462.0		JANA Tripoli, LBY	ITA2 50 Bd: 0800-0900 E nx, 1100-1200 + 1730-1830 F nx
15477.5	'C37A'	MOSSAD Tel Aviv, ISR	ARQ-E 288 Bd: 1535 encrypted tfc to '6XM8' BNDVB Bonn
15541.7		Egyptian E Bamako, MLI	SITOR-A: 1139 ATU-A tfc to Cairo, into
15597.7	'RFGW'	MFA Paris, F	ARQ-E3 96 Bd: 1049 msgs to FJY 2 Port-aux-Francais, 1336 tfc to FJY 2 [XIR]

15600.0 - 15800.0 BROADCASTING <SSB only, as from 01 April 2007> FIXED <536>

15610.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 1915 tfc
15615.0	*AXI 35*	*Darwin Meteo, NT, AUS*	*FAX // 2628.0 kHz $*
15627.7	'RFFA'	MOD Paris, F	ARQ-M2 200 Bd: A: 0001 + 1026-1803 "controle de voie" or tfc [FDX]
15633.0	HMF 26	KCNA Pyongyang, KRE	ITA2 50 Bd: 0400-0600 E nx, 0600-0830 R nx wca, 1000-1200 E nx, 1230-1430 R nx wca
15652.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 1033 msgs to Madrid, 1123 tfc, 1233 msg (5fgs), 1413 msg (Polish press review)
15667.0	FDY	FAF Orleans, F	ITA2 50 Bd: 1058 + 1505 ry
15675.8	HGX 21	MFA Budapest, HNG	DUP-ARQ: 0740-1932 tfc or msg (5lgs) to HGX 41 Damascus or HGX 55 El Djaza'ir or HGX 62 Tripoli or Madrid
15676.0	'NMEY'	French E Niamey, NGR	ARQ6-90 200 Bd: 1638 msg (5lgs) to 'P6Z' Paris
15676.2	HGX 41	Hungarian E Damascus, SYR	DUP-ARQ: 0924 msg (5lgs) to HGX 21 Budapest, 1500 msgs to HGX 21

15676.2	HGX 55	Hungarian E El Djaza'ir, ALG	DUP-ARQ: 1033 msg + tfc to HGX 21 Budapest
	HGX 62	Hungarian E Tripoli, LBY	DUP-ARQ: 1320 msg to HGX 21 Budapest
15679.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 1010 msg (Polish nx), 1026 tfc, 1043 msgs to Delhi
15688.0	'6XM8'	BNDVB Bonn, D	ARQ-E 288 Bd: 0737-1232 encrypted tfc to 'C37A' MOSSAD Tel Aviv
15699.7	'RFFA'	MOD Paris, F	ARQ-E3 192 Bd: 1332 msg to 'RFTJ' Dakar [LFA]
15715.0	MKK	RAF London, G	VFT: ITA2 50 Bd: 0632-1928 ryi
15721.5	'CJL'	MOSSAD Tel Aviv, ISR	ARQ-E 96 Bd: 0720 tfc to 'WJI' SISMI Udine, 1150 clg 'WJI' ITA2 100 Bd: 1152 operational msg to 'WJI' SISMI Udine
15731.0		SUNA Khartoum, SDN	ITA2 50 Bd: 0900 E nx, 1000+ 1415-1800 A nx
15744.5	XVN 36	VNA Hanoi, VTN	ITA2 50 Bd: 0630 E nx
15746.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 1220 tfc, 1332 msg
15751.0		UNID teleprinter	75
15757.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 0602 msg (Polish press review), 0818 msg
15770.0	4QQ 78	DW Trincomalee, SLK	ITA2 100 Bd: 0800 clg Cologne, 0810 ry
15781.0		*USAF AWS Ceiba, PTR*	*FAX // 3232.0 kHz*
15790.5		UNID teleprinter	MFSK 12
15792.0		Polish E Kinshasa, ZAI	ITA2 75 Bd: 0940+1012 msgs to SNN 299 Warsaw
		Polish E Lagos, NIG	POL-ARQ 100 Bd: 0910+1022+ 1120+1302 msgs to SNN 299 Warsaw

15800.0 - 16360.0 FIXED <536>

15801.7		MFA Cairo, EGY	SITOR-A: 0928 ATU-A msgs, 1415 tfc, 1700 ATU-A final tfc, s. off
15821.9	SAM	MFA Stockholm, S	SWED-ARQ: 0728-1550 tfc or msgs to various embassies
	SAM 52	Swedish E Tel Aviv, ISR	SWED-ARQ: 0955 msg (5lgs) after "SSSLLLSSSLLLSSSLLL" to SAM Stockholm
15828.0		UNID teleprinter	75
15833.0		MFA Bucharest, ROU	RUM-FEC 218 Bd: 0624 encrypted tfc
15838.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1420 msgs
15843.0	TAD	MFA Ankara, TUR	FEC-A 144 Bd: 0710 msg (5lgs), 1044 tfc, 1240 msg
		Turkish E Addis Ababa, ETH	FEC-A 144 Bd: 1008 msg to TAD Ankara
		Turkish E Cairo, EGY	FEC-A 144 Bd: 0920 msgs to TAD Ankara
		Turkish E Dushanbe, TJK	FEC-A 144 Bd: 0730 msg to TAD Ankara

15856.5	DMK	MFA Bonn, D	ALIS: 0837-1441 tfc to various embassies ARQ-E 96 Bd: 1445 ry
		German E Dar es Salaam, TZA	ALIS: 1420 encrypted msg to DMK Bonn
15858.5	DMK	MFA Bonn, D	ARQ-E 96 Bd: 1700 tfc, 2040 msg to Brasilia
		German E Brasilia, B	ARQ-E 96 Bd: 1115 msgs to DMK Bonn
		German E Madrid, E	ARQ-E 96 Bd: 0726 tfc to DMK Bonn
15861.7	'RFFX'	MOD Paris, F	ARQ-E 72 Bd: 0545-2058 msgs to 'RFFXI' Bangui [XXI]
15861.9	SAM	MFA Stockholm, S	SWED-ARQ: 0732-1056+1508 msg to various embassies or msg (E press review)
15868.0	'RFGW'	MFA Paris, F	FEC-A 192 Bd: 1250 msg (5lgs)
15873.0	'P6Z'	MFA Paris, F	FEC-A 192 Bd: 0803-2200 tfc or msg (5lgs) to 'J5W' Rabat
15875.0		UNID teleprinter	MFSK
15878.0	*3MA 24*	*CNA T'ai-pei, TAI*	*FAX // 9430.0 kHz*
			CW
15889.7		Egyptian E Tripoli, LBY	SITOR-A: 0850 ATU-A msg to Cairo, 1000 msg (5lgs) + ATU-A msg to Cairo, final tfc, s.off; 1018+1047 msg (5lgs) to Cairo
15898.0	'RFGW'	MFA Paris, F	FEC-A 192 Bd: 0652-1557 tfc or msg (5lgs) or msg (5lgs) to 'U3H' Moscow
15916.0		UNID teleprinter	75
15917.7	8WB 1	Indian E Belgrade, SRB	ITA2 50 Bd: 0705+1215 clg 8WD 4 Delhi
15920.0	CFH	CF Halifax, NS, CAN	ITA2 75 Bd: 1445-2316 clg NAWS
15926.7		Egyptian E Safat, KWT	SITOR-A: 0616 tfc to Cairo
		MFA Cairo, EGY	SITOR-A: 0700 msg (5lgs), final ATU-A tfc, s. off
15930.0	PWX	BN Brasilia, B	ITA2 75 Bd: 1200 ry
15938.0		UNNNSC Pan Mun Jom, KOR	Clover: 0729 msgs + tfc to 4UZ Geneva
15942.0		UNID teleprinter	75
15943.0	OMZ 88	MFA Bratislava, SVK	ITA2 100 Bd: 0810 msg (5fgs) + msg (Slovak nx), 0820+0848 tfc, 0950 msg (Slovak nx)
15946.5	EAE 220	MFA Madrid, E	TWINPLEX YYBB BYBY: SITOR-A: 0808+1015+1250 msg (5lgs), 1548 tfc
15950.0	JJD	RRL Tokyo, J	CW
	RBI 77	*Moscow Meteo, RUS*	*FAX // 53.6 kHz $*
15953.0	CLP 1	MFA Habana, CUB	ITA2 75 Bd: 1550 msgs to Baghdad
15959.0	*NAM*	*USN Norfolk, VA, USA*	*FAX // 3357.0 kHz $*
15961.7	'RFLI'	FF Fort de France, MRT	ARQ-E3 192 Bd: 0648-2204 tfc or msg or msg (5lgs) to 'RFFA' Paris [BFL]
15964.0	GKX	Portishead Air, G	SSB
15976.5		UNID teleprinter	MFSK
15980.0	RWI 76	R Moscow feeder, RUS	SSB
15980.2	'RFVI'	FF Le Port, REU	ARQ-E3 100 Bd: 1415 msg (5lgs) + msg to 'RFFA' Paris [REI]

15991.5		Indonesian E Cairo, EGY	SI-ARQ 96 Bd: 5 characters: 1020 msg (5lgs) to Jakarta
15995.7		UNID French military station (1195)	ARQ-E3 192 Bd: 1017 msg fm 'RFQQAA' to 'RFFLOUR RFFLJBT'
16000.0	VNG	Sydney TS, NSW, AUS	COMB
16015.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 1005 msg (Bulgarian nx)
16016.7		Egyptian E Khartoum, SDN	SITOR-A: 1108 ATU-A tfc to Cairo, into SITOR-B: 1110 ATU-A msg to Cairo
16017.4	DGQ 21L1	PIAB Bonn, D	FEC-A 96 Bd: 1500-1700 G nx
16017.5	DMK	MFA Bonn, D	ALIS: 1225 tfc to Cotonou, 1530 tfc
		German E Cotonou, BEN	ALIS: 1225 encrypted msg after "EEE..." to DMK Bonn
		UNID teleprinter	MFSK
16020.7		MFA Cairo, EGY	SITOR-A: 1415 + 1447 ATU-A tfc
16023.0		Italian E Tehran, IRN	ARQ-E 96 Bd: 1330 msgs to Rome
16024.0	'YNDE'	French E Yaounde, CME	ARQ6-90 200 Bd: 1406 msg (5lgs) to 'P6Z' Paris
16025.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 0920 + 0932 + 1021 + 1029 msgs
	CLP ..	Cuban E Phnom Penh, CBG	ITA2 75 Bd: 1515 msgs + tfc to CLP 1 Habana
16026.0	*BAF 9*	*Beijing Meteo, CHN*	*FAX // 3170.0 kHz*
16026.7		MFA Cairo, EGY	SITOR-A: 1250 msg
16027.6	*NPN*	*USN Apra Harbour, GUM*	*FAX // 10253.0 kHz $*
16030.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 1045 msgs (Bulgarian nx)
		UNID teleprinter	75
16034.0	4XZ	IN Haifa, ISR	CW
16035.0	*9VF 252*	*KYODO Singapore, SNG*	*FAX // 4316.0 kHz $*
16036.0	'DOR'	MFA Sofia, BUL	ITA2 150 Bd: 0837-1018 msg (Bulgarian or E nx)
16040.0	MKK	RAF London, G	VFT: ITA2 50 Bd: 1040 + 1540 ryi
16041.0	AAA 3USA	USA MARS Fort Meade, MD, USA	Packet Radio: 1200 clg AEM 1USA Heidelberg
	AAR 4USD	USA MARS C., SC, USA	PACTOR: 0820 msgs
16041.7		Egyptian E N'djamena, TCD	SITOR-A: 1447 msgs (5lgs) + final ATU-A tfc to Cairo
16045.0		UNID teleprinter	100
16047.0		Romanian E Helsinki, FIN	RUM-FEC 218 Bd: 0933 msg (Romanian press review) to Bucharest
16053.0		Romanian E Helsinki, FIN	RUM-FEC 218 Bd: 0917 msgs to Bucharest
16055.0		Romanian E Tripoli, LBY	RUM-FEC 164 Bd: 0948 + 0954 msg to Bucharest
16056.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1427 msg (Romanian nx)
16062.0		Romanian E Helsinki, FIN	RUM-FEC 218 Bd: 0920 msg to Bucharest
16064.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 1041 msg (5lgs)
16071.7		MFA Cairo, EGY	SITOR-A: 24 h ATU-A msgs
16074.0		MFA Oslo, NOR	SITOR-A: 0659-1352 tfc or msg or msg (N nx)

16077.0		many USACE stat., USA	SSB
16077.5	FDY	FAF Orleans, F	ITA2 50 Bd: 0555+1128+1535+1754 ry
16077.7	'RFFA'	MOD Paris, F	ARQ-E3 192 Bd: 0755-1912 tfc or "controle de voie" or msg or msg (5lgs) to 'RFTJD' Libreville [ITF]
16087.7	'RFVI'	FF Le Port, REU	ARQ-E3 100 Bd: 0603-1703 "controle de cle" or tfc or msg to 'RFFA' Paris [REI]
16101.0	HBD 20	MFA Berne, SUI	SITOR-A: 0840-1432+1925 tfc or msg (F nx) or msg (5lgs) to HBD 61 Cairo
	HBD 61	Swiss E Cairo, EGY	SITOR-A: 1050+1102 msg (5lgs) to HBD 20 Berne
16104.0		MFA Oslo, NOR	TWINPLEX YYBB YBYB: SITOR-A: 0722-1042 tfc or msg (N nx) or tfc to Bangkok or Delhi or Tel Aviv
		Norwegian E Tel Aviv, ISR	TWINPLEX YYBB YBYB: SITOR-A: 1042 tfc to Oslo
16106.7	'RFFVAE'	FF Dhahran, ARS	ARQ-E3 200 Bd: 0758-1734 msgs (5lgs) after "BBBB" to 'RFFA' Paris [DET]
16106.9	SAM	MFA Stockholm, S	SWED-ARQ: 0655-1545 tfc or msg (Swedish nx) to SAM 30 Madrid or SMA 70 Addis Ababa
	SAM 30	Swedish E Madrid, E	SWED-ARQ: 1545 msgs to SAM Stockholm
	SAM 70	Swedish E Addis Ababa, ETH	SWED-ARQ: 1212 tfc to SAM Stockholm
16109.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 1209-1620 msgs
16110.0		Polish E Vienna, AUT	POL-ARQ 100 Bd: 1210 msg (Polish press review) to SNN 299 Warsaw
		UNID teleprinter	75
16111.1	HBD 20	MFA Berne, SUI	SITOR-A: 0557-1855 tfc + msgs + msgs (5lgs) to various embassies
16113.7		MFA Cairo, EGY	SITOR-A: 1350 msg (5lgs) to Bonn
16115.0	'DOR'	MFA Sofia, BUL	IRA 600 Bd: 1105 encrypted tfc ITA2 150 Bd: 0900 msg (Bulgarian nx)
16117.0	6VK 317	PANA Dakar, SEN	ITA2 50 Bd: 0800-2000 E/F nx
16118.0	HBD 20	MFA Berne, SUI	SITOR-A: 0900-1820 tfc or msg (G nx) or msg (5lgs) to HBD 25 Tel Aviv or HBD 46 Habana
	HBD 25	Swiss E Tel Aviv, ISR	SITOR-A: 1130 tfc to HBD 20 Berne
	HBD 46	Swiss E Habana, CUB	SITOR-A: 1820 msg (5lgs) to HBD 20 Berne
16120.0	HBD 20	MFA Berne, SUI	SITOR-A: 1015-1540 msg (F nx) or msg (G nx) or msg or msg (5lgs)
16121.0		UNID teleprinter	CIS 10-11-11 MFSK
16124.0	HBD 20	MFA Berne, SUI	SITOR-A: 1644 msg (5lgs)
		UNID teleprinter	ITA2 50 encrypted

16125.2	'RFQP'	FF Jibuti, DJI	ARQ-M2 200 Bd: A: 0604-1928 "controle de voie" or tfc to 'RFFA' Paris [QPB] B: 1230-1928 tfc to 'RFFA'
16129.0	'M4W'	MOSSAD Tel Aviv, ISR	ITA2 75 Bd: 0830 tfc to 'RK2' MOSSAD/SOUD Moscow, 0840 ry
16135.0	*KVM 70*	*Honolulu Meteo, HWA*	*FAX // 9982.5 kHz $*
16143.0		UNID teleprinter	CIS 10-11-11 MFSK
16143.7	'RFLI'	FF Fort de France, MRT	ARQ-E3 192 Bd: 0932-2232 "controle de voie" or tfc
16147.7	'RFPTC'	FF N'djamena, TCD	ARQ-E3 200 Bd: A: 1055 msgs + msgs (5lgs) after "BBBB" to 'RFFA' Paris, 1556 tfc to 'RFFA' [FDZA]
16149.0		UNID teleprinter	CIS 10-11-11 MFSK
16151.7		Egyptian E Singapore, SNG	SITOR-A: 0957 ATU-A msgs to Cairo
16156.7		Egyptian E Khartoum, SDN	SITOR-A: 0840 ATU-A msg to Cairo
		Egyptian E Tunis, TUN	SITOR-A: 0933 ATU-A msgs to Cairo
16159.0	'CNRY'	French E Conakry, GUI	ARQ6-90 200 Bd: 1332 msg (5lgs) to 'RFGW' Paris, s. off [CNYX]
16165.2	'RFFA'	MOD Paris, F	ARQ-M2 200 Bd: A: 0600-2015 tfc or "controle de voie" to 'RFQP' Jibuti [PQC] B: 0658 tfc to 'RFQP' Jibuti [PQB]
16166.0	*RIJ 75*	*Tashkent Meteo, UZB*	*(hx 8083.0 kHz)*
16170.0		UNID teleprinter	MFSK
16171.7		Egyptian E Rome, I	SITOR-A: 0726-1820 tfc or ATU-A msg to Cairo
16179.0	CLP 1	MFA Habana, CUB	ITA2 50 Bd: 1850 msgs
		UNID teleprinter	MFSK
16183.0	5YE	Nairobi Meteo, KEN	ITA2 100 Bd: 0617-2052 wx
16185.0	CLP 1	MFA Habana, CUB	ITA2 75 Bd: 1804 s. on with ry, 1828+1850 msg (S press review)
	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 0942+1041 msg (Bulgarian nx)
16187.0	*5YE*	*Nairobi Meteo, KEN*	*FAX // 7465.0 kHz $*
16188.0	'DOR'	MFA Sofia, BUL	ITA2 150 Bd: 0840 msg (Bulgarian nx)
16190.0	'DOR'	MFA Sofia, BUL	ITA2 150 Bd: 0908+0944 msg (Bulgarian nx)
16193.2	'RFQP'	FF Jibuti, DJI	ARQ-M2 200 Bd: A: 0710-2014 "controle de voie" or tfc [QRG] B: 0710-1930 "controle de voie" [QPF]
16201.0		Polish E Phnom Penh, CBG	POL-ARQ 100 Bd: 0712+0734 msg to SNN 299 Warsaw
		Polish E Pyongyang, KRE	POL-ARQ 100 Bd: 0934 msg (5fgs) to SNN 299 Warsaw
		UNID station (1295)	ALIS-2 241 Bd: 1319+1538 tfc
16206.0		Turkish E Tripoli, LBY	FEC-A 144 Bd: 1150 msg to TAD Ankara
16207.0	'DKAR'	French E Dakar, SEN	ARQ6-90 200 Bd: 0944 msgs to 'P6Z' Paris [DKRX]

16208.5		UNID teleprinter	MFSK
16209.8		MFA Oslo, NOR	TWINPLEX YYBB BYBY: SITOR-A: 0810 encrypted msg after "RTL922 PAR499 SSSWWWSSS WWW...", final tfc, s. off; 1037 tfc, 1103+1133 msg
16213.0	'DKAR'	French E Dakar, SEN	ARQ6-90 200 Bd: 0937+1011+1645+1721 msg (5lgs) to 'P6Z' Paris [DKRX]
16216.0		Goma, ZAI	SSB
16217.0	'WJI'	SISMI Udine, I	ARQ-E 96 Bd: 1500 clg 'CJL' MOSSAD Tel Aviv ITA2 100 Bd: 1512 msg (5lgs) to 'CJL'
16223.0		Polish E Tel Aviv, ISR	POL-ARQ 100 Bd: 1320 msgs to SNN 299 Warsaw
16225.0	7CB	IN Belawan, INS	CW
16227.7	'RFFXI'	FF Bangui, CAF	ARQ-E 72 Bd: 0735-1934 "essai liaison" or tfc to 'RFFX' Paris [XZI]
16230.0	'O9B'	French E Cairo, EGY	ITA2 100 Bd: 1125 msg (5lgs) to 'P6Z' Paris
16236.0	'BGUI'	French E Bangui, CAF	ARQ6-90 200 Bd: 0930+1502+1726 tfc or msg (5lgs) to 'P6Z' Paris
16240.0	'O9B'	French E Cairo, EGY	FEC-A 192 Bd: 1037 msg (5lgs) to 'P6Z' Paris
16243.0	PWX	BN Brasilia, B	ITA2 75 Bd: 0955 ry
16243.6		MFA Pyongyang, KRE	ITA2 50 Bd: 1345 msg
16245.0	'O6P'	French E Riyadh, ARS	FEC-A 192 Bd: 1040 msg to 'P6Z' Paris, 1550 tfc + msg (5lgs) after "BBBB" to 'P6Z' / 'RFGW'
16246.0		Polish E Tripoli, LBY	POL-ARQ 100 Bd: 1219 msg to SNN 299 Warsaw
16247.0	'RK2'	MOSSAD/SOUD Moscow, RUS	ITA2 75 Bd: 0830 ry, tfc to 'M4W' MOSSAD Tel Aviv
16250.0		UNID teleprinter	100
16251.0		MFA Pyongyang, KRE	ITA2 50 Bd: 1200 msg + msg (5lgs), 1350 msg, 1422 msgs (5lgs)
16252.0		Romanian E Paris, F	RUM-FEC 218 Bd: 1305 msg to Bucharest
16257.0	'O9B'	French E Cairo, EGY	FEC-A 192 Bd: 0836 tfc to 'P6Z' Paris
16260.0	'P6Z'	MFA Paris, F	FEC-A 192 Bd: 0712-1438 ry or tfc or msg (5lgs) to 'G8T' Belgrade or 'U3H' Moscow
16261.7	'RFTJD'	FF Libreville, GAB	ARQ-E3 192 Bd: 1134-2001 tfc or "controle de voie" or msg (5lgs) after "BBBB" to 'RFFA' Paris
16268.0		German E Brasilia, B	ARQ-E 96 Bd: 1400+1930 msg to DMK Bonn
		Serbian E Baghdad, IRQ	ITA2 75 Bd: 1100 msg to 'DFZG' Belgrade
16270.0	OLZ	MFA Prague, CZE	ITA2 200 Bd: 1310+2035 msgs
		UNID teleprinter	ITA2 75 encrypted
16273.0	GKX	Portishead Air, G	SSB
16273.3	GXQ	BA London, G	VFT: ITA2 50 Bd: 0958-2022 ryi

16274.0	7RQ 20	MFA El Djaza'ir, ALG	Coquelet 8: 1420 ATU-A msg, 1500 msg, 1600 tfc to Athens
		Polish E Delhi, IND	POL-ARQ 100 Bd: 1300 msg ("biuletin codzienny") to SNN 299 Warsaw
16277.0	GYU	RN Gibraltar, GIB	CW
	JWT	NN Stavanger, NOR	SITOR-A: 1045+1158+1253 msg (N nx), 1352 msg to LBL 1 Naqoura, 1357 msg (N nx)
	MKD	RAF Akrotiri, CYP	CW
16279.0	7RQ 20	MFA El Djaza'ir, ALG	Coquelet 8: 0920 msgs to Cairo, 1422 msgs to Khartoum, 1430 ATU-A msgs
16280.2	'RFFA'	MOD Paris, F	ARQ-M2 200 Bd: A: 0746-1701 "controle de voie" or tfc or msgs to 'RFQP' Jibuti [RQG]
16285.0	OZU 25	MFA Copenhagen, DNK	TWINPLEX YYBB YBYB: SITOR-A: 0926+0943+1143 msg
16289.0	'RBAT'	French E Rabat, MRC	ARQ6-90 200 Bd: 1525 msg (5lgs) to 'P6Z' Paris
16295.0	'DFZG'	MFA Belgrade, SRB	ITA2 75 Bd: 0606+0755+1109 msgs (E nx) or encrypted msg after "XYXYXY..."
16299.5	9MR	MN Johor Baharu, MLA	ITA2 50 Bd: 1524 ry, msg to Kuching
16300.0	RMD 59	R Moscow feeder, RUS	SSB
16302.0	'DFZG'	MFA Belgrade, SRB	ITA2 75 Bd: 0630-1622 ry or msg (E or F or Serbian nx) or encrypted msg after "XPXPXP..."
16304.0	OLZ	MFA Prague, CZE	ITA2 100 Bd: 0706-1522 msgs
16305.7	'RFPTC'	FF N'djamena, TCD	ARQ-E3 200 Bd: 0746-1954 "controle de voie" or tfc or msg (5lgs) to 'RFFA' Paris [FDZ2A]
16310.2	'RFFA'	MOD Paris, F	ARQ-E3 200 Bd: 0930-1347 tfc or msg (5lgs) after "BBBB"
16312.5	'C37A'	MOSSAD Tel Aviv, ISR	ARQ-E 192 Bd: 0106+0619-1814 encrypted tfc to '6XM8' BNDVB Bonn
			ARQ-E 288 Bd: 0711-1936 clg or encrypted tfc to '6XM8' BNDVB Bonn
16318.5	7RQ 20	MFA El Djaza'ir, ALG	Coquelet 8: 1338+1430+2125 msgs
			Coquelet 13: 0920 tfc
		Algerian E Habana, CUB	Coquelet 8: 1817 msg to 7RQ 20 El Djaza'ir
16318.7		MFA Cairo, EGY	SITOR-A: 0759-1608 ATU-A msgs
16320.5	'DOR'	MFA Sofia, BUL	IRA-ARQ 600 Bd: 1157 msg (E BTA nx)
16322.0		Romanian E Oslo, NOR	RUM-FEC 218 Bd: 0905 msg to Bucharest, 0918 tfc to Bucharest, QSY 16327.0 kHz
		Romanian E Tel Aviv, ISR	RUM-FEC 218 Bd: 1256 msgs to Bucharest
16324.7	'RFTJD'	FF Libreville, GAB	ARQ-E3 192 Bd: 1352-2011 "controle de voie" or tfc or msg to 'RFTJ' Dakar [JDJ]
16325.0		Romanian E Amman, JOR	RUM-FEC 164 Bd: 0918 msgs to Bucharest

16327.7		MFA Cairo, EGY	SITOR-A: 1041+1345+1756+1815+1913 ATU-A msg
16330.0	RKA 75	R Moscow feeder, RUS	SSB
16331.7		MFA Cairo, EGY	SITOR-A: 0905 ATU-A msg
16331.9	'S'	Beacon Arkhangelsk, RUS	CW
16332.0	'C'	Beacon Moscow, RUS	CW
	'F'	Beacon Vladiv., SE, RUS	CW
		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1014-1936 msg (Romanian press review) or encrypted msg
16335.0	FZS 63	Saint Denis Meteo, REU	ITA2 75 Bd: 0325+0625+0925+1225 ry, wx *FAX // 8176.0 kHz $*
		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1048 msg (Romanian nx), 1241 msg
16336.0		UNID teleprinter	81
16336.5	'P6Z'	MFA Paris, F	ARQ6-90 200 Bd: 0918+1556 msgs to Brazzaville [XBRZ]
16339.5	'CJL'	MOSSAD Tel Aviv, ISR	ARQ-E 96 Bd: 0655+0859+1500 tfc to 'WJI' SISMI Udine
			ITA2 100 Bd: 0858+1130+1625 ry
16340.0	CLP 8	Cuban E Conakry, GUI	ITA2 50 Bd: 1403 msgs (5lgs) to CLP 1 Habana
		MFA Bucharest, ROU	RUM-FEC 164 Bd: 0918 msg (Romanian nx), 1244 msg
		Romanian E Moscow, RUS	RUM-FEC 218 Bd: 0913 msg to Bucharest
16340.1	*ZKLF*	*Auckland Meteo, NZL*	*FAX // 5807.0 kHz $*
16342.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 0915 encrypted tfc, 0925 msgs, 1334 encrypted tfc
		UNID teleprinter	MFSK
16345.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 1055 msg (Polish nx)
	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 0929 msgs (Bulgarian nx)
16346.0		Serbian E Tel Aviv, ISR	ITA2 75 Bd: 1218 tfc to 'DFZG' Belgrade
16346.7		MFA Cairo, EGY	SITOR-A: 0825 ATU-A tfc + msgs
16350.0	CLP 1	MFA Habana, CUB	ITA2 75 Bd: 1730 msg (S nx)
16351.7		MFA Islamabad, PAK	SITOR-A: 1220 msg (5lgs), 1941 msg
16352.0		UNID teleprinter	200
16355.0	CLP 1	MFA Habana, CUB	ITA2 50 Bd: 1430 msg (5fgs)
	OLZ	MFA Prague, CZE	ITA2 100 Bd: 0747-0928 msgs

16360.0 - 17410.0 MARITIME MOBILE <500A 500B 520B 529A>

16360.0		ship stations, ch 1601	SSB	QSX 17242.0 kHz
16363.0		ship stations, ch 1602	SSB	QSX 17245.0 kHz
16366.0		ship stations, ch 1603	SSB	QSX 17248.0 kHz
16369.0		ship stations, ch 1604	SSB	QSX 17251.0 kHz
16372.0		ship stations, ch 1605	SSB	QSX 17254.0 kHz
	8WB 4	Indian E Tehran, IRN	ITA2 50 Bd: 1439 clg 8WD 7 Delhi	
16375.0		ship stations, ch 1606	SSB	QSX 17257.0 kHz
16378.0		ship stations, ch 1607	SSB	QSX 17260.0 kHz

16381.0		ship stations, ch 1608	SSB QSX 17263.0 kHz
16384.0		ship stations, ch 1609	SSB QSX 17266.0 kHz
16386.7		**MFA Islamabad, PAK**	**TWINPLEX YYBB BYBY: SITOR-A: 0727-1504 tfc or msg (5lgs) to European embassies or msg (E nx)**
		Pakistan E Ankara, TUR	**SITOR-A: 0830 + 1454 msgs to Islamabad**
		Pakistan E Delhi, IND	**SITOR-A: 1225 + 1626 msgs to Islamabad**
16387.0		ship stations, ch 1610	SSB QSX 17269.0 kHz
16390.0		ship stations, ch 1611	SSB QSX 17272.0 kHz
16393.0		ship stations, ch 1612	SSB QSX 17275.0 kHz
16396.0		ship stations, ch 1613	SSB QSX 17278.0 kHz
16399.0		ship stations, ch 1614	SSB QSX 17281.0 kHz
16402.0		ship stations, ch 1615	SSB QSX 17284.0 kHz
16405.0		ship stations, ch 1616	SSB QSX 17287.0 kHz
16406.0		**MFA Pyongyang, KRE**	**ITA2 50 Bd: 1210 msg (5lgs), s. off**
16408.0		ship stations, ch 1617	SSB QSX 17290.0 kHz
16411.0		ship stations, ch 1618	SSB QSX 17293.0 kHz
16414.0		ship stations, ch 1619	SSB QSX 17296.0 kHz
16417.0		ship stations, ch 1620	SSB QSX 17299.0 kHz
	WCM	Withamsville R, OH, USA	
16420.0		ship stations, ch 1621 (WORLDWIDE CALLING FREQ.)	SSB QSX 17302.0 kHz
	WORLDWIDE	DISTRESS AND SAFETY FREQ.	SSB
16423.0		ship stations, ch 1622	SSB QSX 17305.0 kHz
16426.0		ship stations, ch 1623	SSB QSX 17308.0 kHz
16428.0		**Polish E Nairobi, KEN**	**POL-ARQ 100 Bd: 1505 msgs + press review "prasy" to SNN 299 Warsaw**
16429.0		ship stations, ch 1624	SSB QSX 17311.0 kHz
16432.0		ship stations, ch 1625	SSB QSX 17314.0 kHz
16435.0		ship stations, ch 1626	SSB QSX 17317.0 kHz
16438.0		ship stations, ch 1627	SSB QSX 17320.0 kHz
16441.0		ship stations, ch 1628	SSB QSX 17323.0 kHz
16444.0		ship stations, ch 1629	SSB QSX 17326.0 kHz
16447.0		ship stations, ch 1630	SSB QSX 17329.0 kHz
16448.0		**INTEL T'ai-pei, TAI**	**ARQ-E 288 Bd: 0808 encrypted tfc**
16450.0		ship stations, ch 1631	SSB QSX 17332.0 kHz
16453.0		ship stations, ch 1632	SSB QSX 17335.0 kHz
16453.5	**HGX 21**	**MFA Budapest, HNG**	**DUP-ARQ: 0528-1238 tfc to various embassies**
16456.0		ship stations, ch 1633	SSB QSX 17338.0 kHz
16459.0		ship stations, ch 1634	SSB QSX 17341.0 kHz
16462.0		ship stations, ch 1635	SSB QSX 17344.0 kHz
16465.0		ship stations, ch 1636	SSB QSX 17347.0 kHz
16468.0		ship stations, ch 1637	SSB QSX 17350.0 kHz
16471.0		ship stations, ch 1638	SSB QSX 17353.0 kHz
16474.0		ship stations, ch 1639	SSB QSX 17356.0 kHz
16477.0		ship stations, ch 1640	SSB QSX 17359.0 kHz
16480.0		ship stations, ch 1641	SSB QSX 17362.0 kHz
16483.0		ship stations, ch 1642	SSB QSX 17365.0 kHz
16486.0		ship stations, ch 1643	SSB QSX 17368.0 kHz
16489.0		ship stations, ch 1644	SSB QSX 17371.0 kHz
16492.0		ship stations, ch 1645	SSB QSX 17374.0 kHz
16495.0		ship stations, ch 1646	SSB QSX 17377.0 kHz
16498.0		ship stations, ch 1647	SSB QSX 17380.0 kHz

16501.0		ship stations, ch 1648	SSB QSX 17383.0 kHz
16501.7		MFA Cairo, EGY	SITOR-A: 1033 ATU-A tfc, 1430 msg to Abuja
16504.0		ship stations, ch 1649	SSB QSX 17386.0 kHz
16507.0		ship stations, ch 1650	SSB QSX 17389.0 kHz
16510.0		ship stations, ch 1651	SSB QSX 17392.0 kHz
16513.0		ship stations, ch 1652	SSB QSX 17395.0 kHz
16516.0		ship stations, ch 1653	SSB QSX 17398.0 kHz
16519.0		ship stations, ch 1654	SSB QSX 17401.0 kHz
16522.0		ship stations, ch 1655	SSB QSX 17404.0 kHz
16525.0		ship stations, ch 1656	SSB QSX 17407.0 kHz
16528.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB
16531.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB
	ZLM	RNZN Auckland, NZL	SSB
16534.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB
16537.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB
	ZRH	SAN Cape Town, AFS	ITA2 75 Bd: 1622 clg CXR Montevideo
16540.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB
16543.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB
16546.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB
16589.0	'RBAT'	French E Rabat, MRC	ARQ6-90 200 Bd: 1525 msg to 'P6Z' Paris [RBTX]
16619.0 - - 16683.0		ship stations working frequencies	CW
16623.5		ship stations	QSX 16963.0 kHz (UIW)
16627.7	'RFPTC'	FF N'djamena, TCD	ARQ-E3 200 Bd: 0618 tfc to 'RFFA' Paris, 1925 msg (5lgs) after "BBBB" to 'RFFA', 2000 operational msg to 'RFFA' [FDZ2A]
16683.5		ship stations, channel 1	QSX 16807.0 kHz
16684.0		ship stations, channel 2	QSX 16807.5 kHz
16684.5		ship stations, channel 3	QSX 16808.0 kHz
16685.0		ship stations, channel 4	QSX 16808.5 kHz
16685.5		ship stations, channel 5	QSX 16809.0 kHz
16686.0		ship stations, channel 6	QSX 16809.5 kHz
16686.5		ship stations, channel 7	QSX 16810.0 kHz
16687.0		ship stations, channel 8	QSX 16810.5 kHz
16687.5		ship stations, channel 9	QSX 16811.0 kHz
16688.0		ship stations, channel 10	QSX 16811.5 kHz
16688.5		ship stations, channel 11	QSX 16812.0 kHz
16689.0		ship stations, channel 12	QSX 16812.5 kHz
16689.5		ship stations, channel 13	QSX 16813.0 kHz
16690.0		ship stations, channel 14	QSX 16813.5 kHz
16690.5		ship stations, channel 15	QSX 16814.0 kHz
16691.0		ship stations, channel 16	QSX 16814.5 kHz
16691.5		ship stations, channel 17	QSX 16815.0 kHz
16692.0		ship stations, channel 18	QSX 16815.5 kHz
16692.5		ship stations, channel 19	QSX 16816.0 kHz
16693.0		ship stations, channel 20	QSX 16816.5 kHz
16693.5		ship stations, channel 21	QSX 16817.0 kHz
16694.0		ship stations, channel 22	QSX 16817.5 kHz
16694.5		ship stations, channel 23	QSX 16818.0 kHz
16695.0	WORLDWIDE	NBDPT DISTR. AND SAFETY F.	
16695.5		ship stations, channel 25	QSX 16818.5 kHz
16696.0		ship stations, channel 26	QSX 16819.0 kHz
16696.5		ship stations, channel 27	QSX 16819.5 kHz
16697.0		ship stations, channel 28	QSX 16820.0 kHz
16697.5		ship stations, channel 29	QSX 16820.5 kHz

16698.0	ship stations, channel 30	QSX 16821.0 kHz
16698.5	ship stations, channel 31	QSX 16821.5 kHz
16699.0	ship stations, channel 32	QSX 16822.0 kHz
16699.5	ship stations, channel 33	QSX 16822.5 kHz
16700.0	ship stations, channel 34	QSX 16823.0 kHz
16700.5	ship stations, channel 35	QSX 16823.5 kHz
16701.0	ship stations, channel 36	QSX 16824.0 kHz
16701.5	ship stations, channel 37	QSX 16824.5 kHz
16702.0	ship stations, channel 38	QSX 16825.0 kHz
16702.5	ship stations, channel 39	QSX 16825.5 kHz
16703.0	ship stations, channel 40	QSX 16826.0 kHz
16703.5	ship stations, channel 41	QSX 16826.5 kHz
16704.0	ship stations, channel 42	QSX 16827.0 kHz
16704.5	ship stations, channel 43	QSX 16827.5 kHz
16705.0	ship stations, channel 44	QSX 16828.0 kHz
16705.5	ship stations, channel 45	QSX 16828.5 kHz
16706.0	ship stations, channel 46	QSX 16829.0 kHz
16706.5	ship stations, channel 47	QSX 16829.5 kHz
16707.0	ship stations, channel 48	QSX 16830.0 kHz
16707.5	ship stations, channel 49	QSX 16830.5 kHz
16708.0	ship stations, channel 50	QSX 16831.0 kHz
16708.5	ship stations, channel 51	QSX 16831.5 kHz
16709.0	ship stations, channel 52	QSX 16832.0 kHz
16709.5	ship stations, channel 53	QSX 16832.5 kHz
16710.0	ship stations, channel 54	QSX 16833.0 kHz
16710.5	ship stations, channel 55	QSX 16833.5 kHz
16711.0	ship stations, channel 56	QSX 16834.0 kHz
16711.5	ship stations, channel 57	QSX 16834.5 kHz
16712.0	ship stations, channel 58	QSX 16835.0 kHz
16712.5	ship stations, channel 59	QSX 16835.5 kHz
16713.0	ship stations, channel 60	QSX 16836.0 kHz
16713.5	ship stations, channel 61	QSX 16836.5 kHz
16714.0	ship stations, channel 62	QSX 16837.0 kHz
16714.5	ship stations, channel 63	QSX 16837.5 kHz
16715.0	ship stations, channel 64	QSX 16838.0 kHz
16715.5	ship stations, channel 65	QSX 16838.5 kHz
16716.0	ship stations, channel 66	QSX 16839.0 kHz
16716.5	ship stations, channel 67	QSX 16839.5 kHz
16717.0	ship stations, channel 68	QSX 16840.0 kHz
16717.5	ship stations, channel 69	QSX 16840.5 kHz
16718.0	ship stations, channel 70	QSX 16841.0 kHz
16718.5	ship stations, channel 71	QSX 16841.5 kHz
16719.0	ship stations, channel 72	QSX 16842.0 kHz
16719.5	ship stations, channel 73	QSX 16842.5 kHz
16720.0	ship stations, channel 74	QSX 16843.0 kHz
16720.5	ship stations, channel 75	QSX 16843.5 kHz
16721.0	ship stations, channel 76	QSX 16844.0 kHz
16721.5	ship stations, channel 77	QSX 16844.5 kHz
16722.0	ship stations, channel 78	QSX 16845.0 kHz
16722.5	ship stations, channel 79	QSX 16845.5 kHz
16723.0	ship stations, channel 80	QSX 16846.0 kHz
16723.5	ship stations, channel 81	QSX 16846.5 kHz
16724.0	ship stations, channel 82	QSX 16847.0 kHz
16724.5	ship stations, channel 83	QSX 16847.5 kHz
16725.0	ship stations, channel 84	QSX 16848.0 kHz
16725.5	ship stations, channel 85	QSX 16848.5 kHz
16726.0	ship stations, channel 86	QSX 16849.0 kHz
16726.5	ship stations, channel 87	QSX 16849.5 kHz
16727.0	ship stations, channel 88	QSX 16850.0 kHz
16727.5	ship stations, channel 89	QSX 16850.5 kHz

16728.0	ship stations, channel 90	QSX	16851.0 kHz
16728.5	ship stations, channel 91	QSX	16851.5 kHz
16729.0	ship stations, channel 92	QSX	16852.0 kHz
16729.5	ship stations, channel 93	QSX	16852.5 kHz
16730.0	ship stations, channel 94	QSX	16853.0 kHz
16730.5	ship stations, channel 95	QSX	16853.5 kHz
16731.0	ship stations, channel 96	QSX	16854.0 kHz
16731.5	ship stations, channel 97	QSX	16854.5 kHz
16732.0	ship stations, channel 98	QSX	16855.0 kHz
16732.5	ship stations, channel 99	QSX	16855.5 kHz
16733.0	ship stations, channel 100	QSX	16856.0 kHz
16733.5	ship stations, channel 101	QSX	16856.5 kHz
16734.0	ship stations calling, ch 1	CW	group I
16734.5	ship stations calling, ch 2	CW	group I
16735.0	ship stations calling, ch 5	CW	group II
16735.5	ship stations calling, ch 6	CW	group II
16736.0	ship stations calling, ch 3	CW	common channel
16736.5	ship stations calling, ch 7	CW	group III
16737.0	ship stations calling, ch 8	CW	group III
16737.5	ship stations calling, ch 9	CW	group IV
16738.0	ship stations calling, ch 4	CW	common channel
16738.5	ship stations calling, ch 10	CW	group IV
16739.0	ship stations, channel 102	QSX	16857.0 kHz
16739.5	ship stations, channel 103	QSX	16857.5 kHz
16740.0	ship stations, channel 104	QSX	16858.0 kHz
16740.5	ship stations, channel 105	QSX	16858.5 kHz
16741.0	ship stations, channel 106	QSX	16859.0 kHz
16741.5	ship stations, channel 107	QSX	16859.5 kHz
16742.0	ship stations, channel 108	QSX	16860.0 kHz
16742.5	ship stations, channel 109	QSX	16860.5 kHz
16743.0	ship stations, channel 110	QSX	16861.0 kHz
16743.5	ship stations, channel 111	QSX	16861.5 kHz
16744.0	ship stations, channel 112	QSX	16862.0 kHz
16744.5	ship stations, channel 113	QSX	16862.5 kHz
16745.0	ship stations, channel 114	QSX	16863.0 kHz
16745.5	ship stations, channel 115	QSX	16863.5 kHz
16746.0	ship stations, channel 116	QSX	16864.0 kHz
16746.5	ship stations, channel 117	QSX	16864.5 kHz
16747.0	ship stations, channel 118	QSX	16865.0 kHz
16747.5	ship stations, channel 119	QSX	16865.5 kHz
16748.0	ship stations, channel 120	QSX	16866.0 kHz
16748.5	ship stations, channel 121	QSX	16866.5 kHz
16749.0	ship stations, channel 122	QSX	16867.0 kHz
16749.5	ship stations, channel 123	QSX	16867.5 kHz
16750.0	ship stations, channel 124	QSX	16868.0 kHz
16750.5	ship stations, channel 125	QSX	16868.5 kHz
16751.0	ship stations, channel 126	QSX	16869.0 kHz
16751.5	ship stations, channel 127	QSX	16869.5 kHz
16752.0	ship stations, channel 128	QSX	16870.0 kHz
16752.5	ship stations, channel 129	QSX	16870.5 kHz
16753.0	ship stations, channel 130	QSX	16871.0 kHz
16753.5	ship stations, channel 131	QSX	16871.5 kHz
16754.0	ship stations, channel 132	QSX	16872.0 kHz
16754.5	ship stations, channel 133	QSX	16872.5 kHz
16755.0	ship stations, channel 134	QSX	16873.0 kHz
16755.5	ship stations, channel 135	QSX	16873.5 kHz
16756.0	ship stations, channel 136	QSX	16874.0 kHz
16756.5	ship stations, channel 137	QSX	16874.5 kHz
16757.0	ship stations, channel 138	QSX	16875.0 kHz
16757.5	ship stations, channel 139	QSX	16875.5 kHz

16758.0	ship stations, channel 140	QSX 16876.0 kHz
16758.5	ship stations, channel 141	QSX 16876.5 kHz
16759.0	ship stations, channel 142	QSX 16877.0 kHz
16759.5	ship stations, channel 143	QSX 16877.5 kHz
16760.0	ship stations, channel 144	QSX 16878.0 kHz
16760.5	ship stations, channel 145	QSX 16878.5 kHz
16761.0	ship stations, channel 146	QSX 16879.0 kHz
16761.5	ship stations, channel 147	QSX 16879.5 kHz
16762.0	ship stations, channel 148	QSX 16880.0 kHz
16762.5	ship stations, channel 149	QSX 16880.5 kHz
16763.0	ship stations, channel 150	QSX 16881.0 kHz
16763.5	ship stations, channel 151	QSX 16881.5 kHz
16764.0	ship stations, channel 152	QSX 16882.0 kHz
16764.5	ship stations, channel 153	QSX 16882.5 kHz
16765.0	ship stations, channel 154	QSX 16883.0 kHz
16765.5	ship stations, channel 155	QSX 16883.5 kHz
16766.0	ship stations, channel 156	QSX 16884.0 kHz
16766.5	ship stations, channel 157	QSX 16884.5 kHz
16767.0	ship stations, channel 158	QSX 16885.0 kHz
16767.5	ship stations, channel 159	QSX 16885.5 kHz
16768.0	ship stations, channel 160	QSX 16886.0 kHz
16768.5	ship stations, channel 161	QSX 16886.5 kHz
16769.0	ship stations, channel 162	QSX 16887.0 kHz
16769.5	ship stations, channel 163	QSX 16887.5 kHz
16770.0	ship stations, channel 164	QSX 16888.0 kHz
16770.5	ship stations, channel 165	QSX 16888.5 kHz
16771.0	ship stations, channel 166	QSX 16889.0 kHz
16771.5	ship stations, channel 167	QSX 16889.5 kHz
16772.0	ship stations, channel 168	QSX 16890.0 kHz
16772.5	ship stations, channel 169	QSX 16890.5 kHz
16773.0	ship stations, channel 170	QSX 16891.0 kHz
16773.5	ship stations, channel 171	QSX 16891.5 kHz
16774.0	ship stations, channel 172	QSX 16892.0 kHz
16774.5	ship stations, channel 173	QSX 16892.5 kHz
16775.0	ship stations, channel 174	QSX 16893.0 kHz
16775.5	ship stations, channel 175	QSX 16893.5 kHz
16776.0	ship stations, channel 176	QSX 16894.0 kHz
16776.5	ship stations, channel 177	QSX 16894.5 kHz
16777.0	ship stations, channel 178	QSX 16895.0 kHz
	PNA Manila, PHL	SITOR-B: 1100 E nx
16777.5	ship stations, channel 179	QSX 16895.5 kHz
16778.0	ship stations, channel 180	QSX 16896.0 kHz
16778.5	ship stations, channel 181	QSX 16896.5 kHz
16779.0	ship stations, channel 182	QSX 16897.0 kHz
16779.5	ship stations, channel 183	QSX 16897.5 kHz
16780.0	ship stations, channel 184	QSX 16898.0 kHz
16780.5	ship stations, channel 185	QSX 16898.5 kHz
16781.0	ship stations, channel 186	QSX 16899.0 kHz
16781.5	ship stations, channel 187	QSX 16899.5 kHz
16782.0	ship stations, channel 188	QSX 16900.0 kHz
16782.5	ship stations, channel 189	QSX 16900.5 kHz
16783.0	ship stations, channel 190	QSX 16901.0 kHz
16783.5	ship stations, channel 191	QSX 16901.5 kHz
16784.0	ship stations, channel 192	QSX 16902.0 kHz
16784.5	ship stations, channel 193	QSX 16902.5 kHz
16785.0	ship stations, channel 1	non-paired
16785.5	ship stations, channel 2	non-paired
16786.0	ship stations, channel 3	non-paired
16786.5	ship stations, channel 4	non-paired
16787.0	ship stations, channel 5	non-paired

16787.5		ship stations, channel 6	non-paired
		ship stations	QSX 16914.5 kHz (SPB 83)
16788.0		ship stations, channel 7	non-paired
		PNA Manila, PHL	SITOR-B: 0630+0750-0810+0930+1450-1510+1650-1710 E nx
16788.5		ship stations, channel 8	non-paired
16789.0		ship stations, channel 9	non-paired
16789.5		ship stations, channel 10	non-paired
16790.0		ship stations, channel 11	non-paired
16790.5		ship stations, channel 12	non-paired
		ship stations	QSX 17024.0 kHz (SAB 83)
16791.0		ship stations, channel 13	non-paired
16791.5		ship stations, channel 14	non-paired
16792.0		ship stations, channel 15	non-paired
16792.5		ship stations, channel 16	non-paired
16793.0		ship stations, channel 17	non-paired
16793.5		ship stations, channel 18	non-paired
16794.0		ship stations, channel 19	non-paired
16794.5		ship stations, channel 20	non-paired
16795.0		ship stations, channel 21	non-paired
16795.5		ship stations, channel 22	non-paired
16796.0		ship stations, channel 23	non-paired
16796.5		ship stations, channel 24	non-paired
16797.0		ship stations, channel 25	non-paired
16797.5		ship stations, channel 26	non-paired
16798.0		ship stations, channel 27	non-paired
		PNA Manila, PHL	SITOR-B: 1100+1300 E nx
16798.5		ship stations, channel 28	non-paired
16799.0		ship stations, channel 29	non-paired
16799.5		ship stations, channel 30	non-paired
16800.0		ship stations, channel 31	non-paired
16800.5		ship stations, channel 32	non-paired
16801.0		ship stations, channel 33	non-paired
16801.5		ship stations, channel 34	non-paired
16802.0		ship stations, channel 35	non-paired
16802.5		ship stations, channel 36	non-paired
16803.0		ship stations, channel 37	non-paired
16803.5		ship stations, channel 38	non-paired
16804.0		ship stations, channel 39	non-paired
16804.5	WORLDWIDE	DSC DISTRESS AND SAFETY F.	
16805.0	WORLDWIDE	SHIP STATIONS DSC FREQUENCY	QSX 16903.0 KHz
16805.5	WORLDWIDE	SHIP STATIONS DSC FREQUENCY	
16806.0	WORLDWIDE	SHIP STATIONS DSC FREQUENCY	
16806.5	WORLDWIDE	NBDPT MSI FREQUENCY	
	NMC	USCG San Francisco, CA, USA	SITOR-A: 0336+0903+1035 tts SITOR-B: 0000+1800 wx CW
	NMF	USCG Boston, MA, USA	SITOR-B: 1218 ice report, 1630 wx
	NOJ	USCG Kodiak, ALS	SITOR-A: 0650+1600 tts SITOR-B: 1500 wx
	NRV	USCG Apra Harbour, GUM	SITOR-B: 0000+0200+0400+0500+0900+1100+1400+1500+2300 wx
16807.0		coast stations, channel 1	QSX 16683.5 kHz
	JFA	*Funabashi F R, J*	*scheduled*
	KFS	*San Francisco R, CA, USA*	*scheduled*
	YLQ	*Riga R, LVA*	*scheduled*

16807.0	9VG 82	Singapore R, SNG	SITOR-A: 0200-0422+1024-2002 tts SITOR-B: 0030 wx, 0130+0330+0530+0730+0930+1130 tfc list, 1230 wx, 1330+1530+1730+1930+2130+2330 tfc list CW
16807.5		coast stations, channel 2	QSX 16684.0 kHz
	GKE 6	Portishead R, G	SITOR-A: 0422-2242 tts SITOR-B: 0900 tfc list, 0930 wx, 1300 tfc list CW
	WNU	*Slidell R, LA, USA*	*scheduled*
	ZLA	*Awanui R, NZL*	*scheduled*
16808.0		coast stations, channel 3	QSX 16684.5 kHz
	KFS	*San Francisco R, CA, USA*	*scheduled*
	SPA 81	Gdynia R, POL	SITOR-A: 0619-1947 tts CW
	VWM	*Madras R, IND*	*scheduled*
	XSV	*Tianjin R, CHN*	*scheduled*
16808.5		coast stations, channel 4	QSX 16685.0 kHz
	CNP	*Casablanca R, MRC*	*scheduled*
	KLB	*Seattle R, WA, USA*	*scheduled*
	LSD 836	Buenos Aires R, ARG	SITOR-A: 0938+1008+1626+1928+1946+2017 tts CW
	ZLA	*Awanui R, NZL*	*scheduled*
16809.0		coast stations, channel 5	QSX 16685.5 kHz
	D4A	*Mindelo R, S. Vicente, CPV*	*scheduled*
	WLO	Mobile R, AL, USA	SITOR-A: 24 h tts CW
16809.5		coast stations, channel 6	QSX 16686.0 kHz
	EAD	Madrid R, E	SITOR-A: 0602-2018 tts SITOR-B: 0100+0300+0500+0700+0900+1100+1300+1500+1700+1900+2100+2300 tfc list CW
	SPB 81	*Szczecin R, POL*	*scheduled*
	VIP 35	Perth R, WA, AUS	SITOR-A: 0008-1744 tts CW
	WSC	*Tuckerton R, NJ, USA*	*scheduled*
	9GX	*Tema R, GHA*	*scheduled*
16810.0		coast stations, channel 7	QSX 16686.5 kHz
	HPP	*Panama R, PNR*	*scheduled*
	PKD	*Surabaya R, INS*	*scheduled*
	WAH	*Saint Thomas R, VIR*	*scheduled*
	XSG	*Shanghai R, CHN*	*scheduled*
16810.5		coast stations, channel 8	QSX 16687.0 kHz
	FFT 81	Saint Lys R, F	SITOR-A: 0620-2017 tts SITOR-B: 0700+1300+1400+1700+2000 tfc list CW
	UAT	*Moscow R, RUS*	*scheduled*
16811.0		coast stations, channel 9	QSX 16687.5 kHz
	CBV	Valparaiso R, CHL	SITOR-A: 1744-1145 tts CW
	HZG	*Dammam R, ARS*	*scheduled*
	9MG 17	*Georgetown R, Pin. I., MLA*	*scheduled*

16811.5		coast stations, channel 10	QSX 16688.0 kHz
	A9M	Hamala R, BHR	SITOR-A: 24 h tts CW
	D4A	*Mindelo R, S. Vicente, CPV*	*scheduled*
	VIP 78	Perth R, WA, AUS	SITOR-A: 1025 tts CW
	ZHH	*Jamestown R, SHN*	*scheduled*
16812.0		coast stations, channel 11	QSX 16688.5 kHz
	CBV	*Valparaiso R, CHL*	*scheduled*
	EQN	*Khomeini R, IRN*	*scheduled*
	JNA	*JN Tokyo, J*	*scheduled*
	PKB	*Belawan R, INS*	*scheduled*
	WLO	Mobile R, AL, USA	SITOR-A: 24 h tts CW
	XSQ	*Guangzhou R, CHN*	*scheduled*
	3AC 27	*Monte Carlo R, MCO*	*scheduled*
16812.5		coast stations, channel 12	QSX 16689.0 kHz
	NMC	USCG San Francisco, CA, USA	SITOR-A: 0440-1510 tts CW
16813.0		coast stations, channel 13	QSX 16689.5 kHz
	KPH	San Francisco R, CA, USA	SITOR-A: 0022 tts
	UAT	Moscow R, RUS	SITOR-A: 0620-2135 R tts wtsca SITOR-B: 1800 tfc list CW
	WCC	*Chatham R, MA, USA*	*scheduled*
16813.5		coast stations, channel 14	QSX 16690.0 kHz
	KPH	*San Francisco R, CA, USA*	*scheduled*
	LSD 836	*Buenos Aires R, ARG*	*scheduled*
	SAB 814	Goeteborg R, S	SITOR-A: 0620-2016 tts
	WCC	*Chatham R, MA, USA*	*scheduled*
16814.0		coast stations, channel 15	QSX 16690.5 kHz
	A7D	*Doha R, QAT*	*scheduled*
	UGH	*Provideniya R, FE, RUS*	*scheduled*
	WLO	Mobile R, AL, USA	SITOR-A: 24 h tts CW
16814.5		coast stations, channel 16	QSX 16691.0 kHz
	HEC 17	Berne R, SUI	SITOR-A: 0606-2125 tts SITOR-B: 0030 + 0230 + 0430 + 0630 + 0830 + 1030 + 1230 + 1430 + 1630 + 1830 + 2030 + 2230 tfc list CW
	9AR	*Rijeka R, HRV*	*scheduled*
16815.0		coast stations, channel 17	QSX 16691.5 kHz
	LZW 63	*Varna R, BUL*	*scheduled*
	SVU 6	*Athens R, GRC*	*scheduled*
	9VG 83	Singapore R, SNG	SITOR-A: 24 h tts CW
16815.5		coast stations, channel 18	QSX 16692.0 kHz
	LSD 836	*Buenos Aires R, ARG*	*scheduled*
	OXZ	Lyngby R, DNK	SITOR-A: 0638-2125 tts SITOR-B: 0130 + 0330 + 0530 + 0730 + 0930 + 1130 + 1330 + 1530 + 1730 + 1930 + 2130 + 2330 tfc list CW
	9MG 17	Georgetown R, Pinang Island, MLA	SITOR-B: 0730 + 1130 + 1330 tfc list

16816.0		coast stations, channel 19	QSX 16692.5 kHz
	JYO	*Aqaba R, JOR*	*scheduled*
	WNU	Slidell R, LA, USA	SITOR-B: 1300 + 2100 tfc list, wx
	YLQ	*Riga R, LVA*	*scheduled*
	ZSC 64	Cape Town R, AFS	SITOR-A: 0441-1952 tts SITOR-B: 0615 tfc list, navigational warnings; 0815 tfc list, 0900 navigational warnings, 0930 wx, 1015 + 1215 + 1415 + 1615 tfc list, 1700 navigational warnings, 1730 wx CW
16816.5		coast stations, channel 20	QSX 16693.0 kHz
	A7D	*Doha R, QAT*	*scheduled*
	IAR	*Rome R, I*	*scheduled*
16817.0		coast stations, channel 21	QSX 16693.5 kHz
	KPH	*San Francisco R, CA, USA*	*scheduled*
	WCC	Chatham R, MA, USA	SITOR-A: 0546-2255 tts SITOR-B: 0040 + 0240 tfc list; 0440 tfc list, wx; 0640 + 0840 + 1040 tfc list; 1240 tfc list, wx; 1440 tfc list; 1640 tfc list, wx; 1840 + 2040 + 2240 tfc list CW
16817.5		coast stations, channel 22	QSX 16694.0 kHz
	KPH	San Francisco R, CA, USA	SITOR-A: 0014-1027 + 1722 + 1920 + 2036 tts CW
	UBE	*Petropavl.-Km. R, FE, RUS*	*scheduled*
	3AC 37	*Monte Carlo R, MCO*	*scheduled*
16818.0		coast stations, channel 23	QSX 16694.5 kHz
	SVT 6	*Athens R, GRC*	*scheduled*
	YLQ	*Riga R, LVA*	*scheduled*
16818.5		coast stations, channel 25	QSX 16695.5 kHz
	WLO	Mobile R, AL, USA	SITOR-A: 0749-2127 tts CW
	9VG 96	Singapore R, SNG	SITOR-A: 24 h tts CW
16819.0		coast stations, channel 26	QSX 16696.0 kHz
	CNP	*Casablanca R, MRC*	*scheduled*
	EAD	Madrid R, E	SITOR-B: 0100 + 0300 + 0500 + 0700 + 0900 + 1100 + 1300 + 1500 + 1700 + 1900 + 2100 + 2300 tfc list
	UTQ	*Kiyev R, UKR*	*scheduled*
16819.5		coast stations, channel 27	QSX 16696.5 kHz
	NMN	USCG Portsmouth, VA, USA	SITOR-A: 0749-2127 tts CW
16820.0		coast stations, channel 28	QSX 16697.0 kHz
	IAR	Rome R, I	SITOR-A: 0622-2015 tts CW
	KFS	San Francisco R, CA, USA	SITOR-A: 1909 + 2025 tts
16820.5		coast stations, channel 29	QSX 16697.5 kHz
	GKL 6	*Portishead R, G*	*scheduled*
	WLO	Mobile R, AL, USA	SITOR-A: 24 h tts CW
16821.0		coast stations, channel 30	QSX 16698.0 kHz
	FFT 83	Saint Lys R, F	SITOR-A: 0701-1924 tts CW

16821.0	VRX	Victoria Harbour R, HKG	SITOR-A: 24 h tts SITOR-B: 0000+0400+0800+1200+1600 tfc list CW
16821.5		coast stations, channel 31	QSX 16698.5 kHz
	OXZ	Lyngby R, DNK	SITOR-A: 0536-2053 tts SITOR-B: 0130+0330+0530+0730+0930+1130+1330+1530+1730+1930+2130+2330 tfc list CW
16822.0		coast stations, channel 32	QSX 16699.0 kHz
	VAI	CCG Vancouver, BC, CAN	SITOR-B: 0200+0230+0700+0730+1900+1930 wx
	3AC 47	*Monte Carlo R, MCO*	*scheduled*
16822.5		coast stations, channel 33	QSX 16699.5 kHz
	HPP	Panama R, PNR	SITOR-A: 1825+2149 tts CW
	9VG 97	Singapore R, SNG	SITOR-A: 0029-1144 tts CW
16823.0		coast stations, channel 34	QSX 16700.0 kHz
	IAR	Rome R, I	SITOR-A: 1901 tts CW
	ICB	*Genova R, I*	*scheduled*
	ZSC	*Cape Town R, AFS*	*scheduled*
16823.5		coast stations, channel 35	QSX 16700.5 kHz
	XSQ	*Guangzhou R, CHN*	*scheduled*
16824.0		coast stations, channel 36	QSX 16701.0 kHz
	GKP 6	Portishead R, G	SITOR-A: 24 h tts CW
16824.5		coast stations, channel 37	QSX 16701.5 kHz
	LPD	General Pacheco R, ARG	SITOR-A: 0033-0320+0932 tts CW
	YLQ	Riga R, LVA	SITOR-A: 1525+2025 R tts wtsca
16825.0		coast stations, channel 38	QSX 16702.0 kHz
	KPH	*San Francisco R, CA, USA*	*scheduled*
	OFA	*Helsinki R, FIN*	*scheduled*
	WCC	Chatham R, MA, USA	SITOR-A: 24 h tts SITOR-B: 0040+0240 tfc list; 0440 tfc list, wx; 0640+0840+1040 tfc list; 1240 tfc list, wx; 1440 tfc list; 1640 tfc list, wx; 1840+2040+2240 tfc list CW
	YLQ	*Riga R, LVA*	*scheduled*
	9AR	*Rijeka R, HRV*	*scheduled*
16825.5		coast stations, channel 39	QSX 16702.5 kHz
	LPD	*General Pacheco R, ARG*	*scheduled*
	LZW 64	*Varna R, BUL*	*scheduled*
	UQB	*Kholmsk R, FE, RUS*	*scheduled*
	7TK 28	*Boufarik R, ALG*	*scheduled*
16826.0		coast stations, channel 40	QSX 16703.0 kHz
	EAD	Madrid R, E	SITOR-B: 0100+0300+0500+0700+0900+1100+1300+1500+1700+1900+2100+2300 tfc list

16826.0	ESA	Tallinn R, EST	SITOR-A: 0623-2015 R tts wtsca SITOR-B: 1115 R nx wtsca CW
	WLO	Mobile R, AL, USA	SITOR-A: 0608 + 1203-2022 tts CW
16826.5		coast stations, channel 41	QSX 16703.5 kHz
	PCH 65	Scheveningen R, NLD	SITOR-A: 0503-2152 tts CW
16827.0		coast stations, channel 42	QSX 16704.0 kHz
16827.5		coast stations, channel 43	QSX 16704.5 kHz
	UHS	*Murmansk R, RUS*	*scheduled*
	UUI	*Odessa R, UKR*	*scheduled*
	VCT	*Tors Cove R, NFLD, CAN*	*scheduled*
16828.0		coast stations, channel 44	QSX 16705.0 kHz
	SPB 84	*Szczecin R, POL*	*scheduled*
	WLO	Mobile R, AL, USA	SITOR-A: 0736-2013 tts CW
16828.5		coast stations, channel 45	QSX 16705.5 kHz
16829.0		coast stations, channel 46	QSX 16706.0 kHz
	USU	Mariupol R, UKR	SITOR-A: 0433-2013 R tts wtsca SITOR-B: 0630 tfc list, 1435 + 1540 navigational warnings CW
	XSG	*Shanghai R, CHN*	*scheduled*
16829.5		coast stations, channel 47	QSX 16706.5 kHz
	KFS	San Francisco R, CA, USA	SITOR-A: 2320 + 2342 tts SITOR-B: 2230 tfc list
16830.0		coast stations, channel 48	QSX 16707.0 kHz
	HEC 27	Berne R, SUI	SITOR-A: 0537-2130 tts CW
16830.5		coast stations, channel 49	QSX 16707.5 kHz
	SVU 6	Athens R, GRC	SITOR-A: 0635-1924 tts SITOR-B: 0625 + 1130 tfc list, 1300 tts, 1425 tfc list CW
16831.0		coast stations, channel 50	QSX 16708.0 kHz
	SPB 85	*Szczecin R, POL*	*scheduled*
	VRX	Victoria Harbour R, HKG	SITOR-A: 0340-1048 tts CW
	WLO	Mobile R, AL, USA	SITOR-A: 0610-2023 tts CW
16831.5		coast stations, channel 51	QSX 16708.5 kHz
	FFT 83	Saint Lys R, F	SITOR-A: 0610-2055 tts CW
16832.0		coast stations, channel 52	QSX 16709.0 kHz
	LGX 3	Rogaland R, NOR	SITOR-A: 0612-2130 tts CW
	WNU	*Slidell R, LA, USA*	*scheduled*
16832.5		coast stations, channel 53	QSX 16709.5 kHz
16833.0		coast stations, channel 54	QSX 16710.0 kHz
	FFT 85	*Saint Lys R, F*	*scheduled*
	WLO	*Mobile R, AL, USA*	*scheduled*
16833.5		coast stations, channel 55	QSX 16710.5 kHz
	IAR	*Rome R, I*	*scheduled*
16834.0		coast stations, channel 56	QSX 16711.0 kHz
	CUL	Lisbon R, POR	SITOR-B: 0830 tfc list, 1434 tts
16834.5		coast stations, channel 57	QSX 16711.5 kHz
	SAB	*Goeteborg R, S*	*scheduled*
	VCT	*Tors Cove R, NFLD, CAN*	*scheduled*

16834.5	WNU	Slidell R, LA, USA	SITOR-A: 0340+1252+1440+1727 tts SITOR-B: 2145 wx CW
16835.0		coast stations, channel 58	QSX 16712.0 kHz
16835.5		coast stations, channel 59	QSX 16712.5 kHz
	7TK 29	*Boufarik R, ALG*	*scheduled*
16836.0		coast stations, channel 60	QSX 16713.0 kHz
	DAN	Norddeich R, D	SITOR-A: 0611-1923 tts CW
	UFL	Vladivostok R, SE, RUS	ITA2 50 Bd: 24 h R tts wtsca SITOR-A: 1030 R tts wtsca CW
16836.5		coast stations, channel 61	QSX 16713.5 kHz
	WLO	Mobile R, AL, USA	SITOR-A: 24 h tts CW
16837.0		coast stations, channel 62	QSX 16714.0 kHz
	3AC 57	*Monte Carlo R, MCO*	*scheduled*
16837.5		coast stations, channel 63	QSX 16714.5 kHz
	LZW 65	*Varna R, BUL*	*scheduled*
16838.0		coast stations, channel 64	QSX 16715.0 kHz
	SAB 864	Goeteborg R, S	SITOR-A: 0501-2133 tts
	SPB 82	*Szczecin R, POL*	*scheduled*
	XSX	*Chi-lung R, TAI*	*scheduled*
16838.5		coast stations, channel 65	QSX 16715.5 kHz
	9AR	Rijeka R, HRV	SITOR-A: 1127-1954 tts CW
16839.0		coast stations, channel 66	QSX 16716.0 kHz
	PCH 66	Scheveningen R, NLD	SITOR-A: 0424-2322 tts SITOR-B: 0115+0315+0515 0715+0915+1115+1315+1515+1715+1915+2115+2315 tfc list CW
	SPA 82	*Gdynia R, POL*	*scheduled*
16839.5		coast stations, channel 67	QSX 16716.5 kHz
	IAR	*Rome R, I*	*scheduled*
	UFN	Novorossiysk R, RUS	SITOR-A: 0624-1922 R tts wtsca CW
16840.0		coast stations, channel 68	QSX 16717.0 kHz
	GKQ 6	Portishead R, G	SITOR-A: 0717-2135 tts CW
16840.5		coast stations, channel 69	QSX 16717.5 kHz
16841.0		coast stations, channel 70	QSX 16718.0 kHz
	JFA	*Funabashi F R, J*	*scheduled*
	UFZ	Vladivostok R, SE, RUS	SITOR-A: 0103+0341+2145 R tts wtsca CW
	'ILMB'	French E Islamabad, PAK	ARQ6-90 200 Bd: 0720 msg (5lgs) to 'P6Z' Paris [ILMX]
16841.5		coast stations, channel 71	QSX 16718.5 kHz
16842.0		coast stations, channel 72	QSX 16719.0 kHz
16842.5		coast stations, channel 73	QSX 16719.5 kHz
	KEJ	Hoolehua R, HWA	SITOR-B: H+15 tfc list
16843.0		coast stations, channel 74	QSX 16720.0 kHz
16843.5		coast stations, channel 75	QSX 16720.5 kHz

16844.0		coast stations, channel 76	QSX 16721.0 kHz
	VCT	Tors Cove R, NFLD, CAN	SITOR-A: 1119+1319+1807+1942+2010+2132 tts SITOR-B: 0451+1051+1651 wx, 1700 tfc list, 2000 E nx, 2251 wx CW
	4PB	*Colombo R, SLK*	*scheduled*
16844.5		coast stations, channel 77	QSX 16721.5 kHz
16845.0		coast stations, channel 78	QSX 16722.0 kHz
16845.5		coast stations, channel 79	QSX 16722.5 kHz
16846.0		coast stations, channel 80	QSX 16723.0 kHz
	UGC	Saint Petersburg R, RUS	SITOR-A: 0612-2009 R tts wtsca SITOR-B: 1255 tfc list, 1426 R tts wtsca, 1545+2000 tfc list CW
16846.5		coast stations, channel 81	QSX 16723.5 kHz
16847.0		coast stations, channel 82	QSX 16724.0 kHz
	HKC	*Buenaventura R, CLM*	*scheduled*
16847.5		coast stations, channel 83	QSX 16724.5 kHz
16848.0		coast stations, channel 84	QSX 16725.0 kHz
16848.5		coast stations, channel 85	QSX 16725.5 kHz
16849.0		coast stations, channel 86	QSX 16726.0 kHz
16849.5		coast stations, channel 87	QSX 16726.5 kHz
16850.0		coast stations, channel 88	QSX 16727.0 kHz
16850.5		coast stations, channel 89	QSX 16727.5 kHz
16851.0		coast stations, channel 90	QSX 16728.0 kHz
	TAH	*Istanbul R, TUR*	*scheduled*
	UON	Baku R, AZE	ITA2 50 Bd: 0705 ry, R tts wtsca; 1206 R tts wtsca SITOR-B: 1315 R schedule wtsca CW
16851.5		coast stations, channel 91	QSX 16728.5 kHz
	SAB 891	Goeteborg R, S	SITOR-A: 0842+1128 tts SITOR-B: 1230 tfc list CW
16852.0		coast stations, channel 92	QSX 16729.0 kHz
16852.5		coast stations, channel 93	QSX 16729.5 kHz
16853.0		coast stations, channel 94	QSX 16730.0 kHz
16853.5		coast stations, channel 95	QSX 16730.5 kHz
16854.0		coast stations, channel 96	QSX 16731.0 kHz
16854.5		coast stations, channel 97	QSX 16731.5 kHz
16855.0		coast stations, channel 98	QSX 16732.0 kHz
16855.5		coast stations, channel 99	QSX 16732.5 kHz
16856.0		coast stations, channel 100	QSX 16733.0 kHz
	TAH	*Istanbul R, TUR*	*scheduled*
16856.5		coast stations, channel 101	QSX 16733.5 kHz
16857.0		coast stations, channel 102	QSX 16739.0 kHz
16857.5		coast stations, channel 103	QSX 16739.5 kHz
	UUI	Odessa R, UKR	ITA2 50 Bd: 1300 R tts wtsca SITOR-A: 0626-2006 R tts wtsca CW
16858.0		coast stations, channel 104	QSX 16740.0 kHz
16858.5		coast stations, channel 105	QSX 16740.5 kHz
16859.0		coast stations, channel 106	QSX 16741.0 kHz
16859.5		coast stations, channel 107	QSX 16741.5 kHz
16860.0		coast stations, channel 108	QSX 16742.0 kHz
16860.5		coast stations, channel 109	QSX 16742.5 kHz
	LZW 66	*Varna R, BUL*	*scheduled*
16861.0		coast stations, channel 110	QSX 16743.0 kHz

16861.5		**coast stations, channel 111**	**QSX 16743.5 kHz**
16862.0		**coast stations, channel 112**	**QSX 16744.0 kHz**
	VTR	IN Port Blair, And. Is., IND	CW
16862.5		**coast stations, channel 113**	**QSX 16744.5 kHz**
16863.0		**coast stations, channel 114**	**QSX 16745.0 kHz**
16863.5		**coast stations, channel 115**	**QSX 16745.5 kHz**
16864.0		**coast stations, channel 116**	**QSX 16746.0 kHz**
16864.5		**coast stations, channel 117**	**QSX 16746.5 kHz**
16865.0		**coast stations, channel 118**	**QSX 16747.0 kHz**
	XSQ	***Guangzhou R, CHN***	***scheduled***
16865.5		**coast stations, channel 119**	**QSX 16747.5 kHz**
16866.0		**coast stations, channel 120**	**QSX 16748.0 kHz**
16866.5		**coast stations, channel 121**	**QSX 16748.5 kHz**
16867.0		**coast stations, channel 122**	**QSX 16749.0 kHz**
	SAB 822	***Goeteborg R, S***	***scheduled***
16867.5		**coast stations, channel 123**	**QSX 16749.5 kHz**
16868.0		**coast stations, channel 124**	**QSX 16750.0 kHz**
	9VG 48	Singapore R, SNG	SITOR-A: 0342+0423+1129+ 1259+1320 tts CW
16868.5		**coast stations, channel 125**	**QSX 16750.5 kHz**
16869.0		**coast stations, channel 126**	**QSX 16751.0 kHz**
	URM	Odessa R, UKR	CW
16869.5		**coast stations, channel 127**	**QSX 16751.5 kHz**
16870.0		**coast stations, channel 128**	**QSX 16752.0 kHz**
	KMI	***Dixon R, CA, USA***	***scheduled***
16870.3	DZJ	Bulacan R, PHL	CW
16870.5		**coast stations, channel 129**	**QSX 16752.5 kHz**
16871.0		**coast stations, channel 130**	**QSX 16753.0 kHz**
16871.5		**coast stations, channel 131**	**QSX 16753.5 kHz**
16872.0		**coast stations, channel 132**	**QSX 16754.0 kHz**
16872.5		**coast stations, channel 133**	**QSX 16754.5 kHz**
16873.0		**coast stations, channel 134**	**QSX 16755.0 kHz**
16873.5		**coast stations, channel 135**	**QSX 16755.5 kHz**
16874.0		**coast stations, channel 136**	**QSX 16756.0 kHz**
16874.5		**coast stations, channel 137**	**QSX 16756.5 kHz**
16875.0		**coast stations, channel 138**	**QSX 16757.0 kHz**
		MFA Pyongyang, KRE	ITA2 50 Bd: 1323 msgs (5lgs)
16875.5		**coast stations, channel 139**	**QSX 16757.5 kHz**
16876.0		**coast stations, channel 140**	**QSX 16758.0 kHz**
16876.5		**coast stations, channel 141**	**QSX 16758.5 kHz**
16877.0		**coast stations, channel 142**	**QSX 16759.0 kHz**
16877.5		**coast stations, channel 143**	**QSX 16759.5 kHz**
16878.0		**coast stations, channel 144**	**QSX 16760.0 kHz**
16878.5		**coast stations, channel 145**	**QSX 16760.5 kHz**
16879.0		**coast stations, channel 146**	**QSX 16761.0 kHz**
	LZW 67	Varna R, BUL	SITOR-A: 1028+1035+1258 tts SITOR-B: 1045+1245 tfc list CW
16879.5		**coast stations, channel 147**	**QSX 16761.5 kHz**
	SAB 847	***Goeteborg R, S***	***scheduled***
16880.0		**coast stations, channel 148**	**QSX 16762.0 kHz**
	XSQ	Guangzhou R, CHN	SITOR-A: 2008-1513 tts CW
16880.5		**coast stations, channel 149**	**QSX 16762.5 kHz**
16881.0		**coast stations, channel 150**	**QSX 16763.0 kHz**
	TAH	***Istanbul R, TUR***	***scheduled***
16881.5		**coast stations, channel 151**	**QSX 16763.5 kHz**
16882.0		**coast stations, channel 152**	**QSX 16764.0 kHz**
16882.5		**coast stations, channel 153**	**QSX 16764.5 kHz**

16883.0		coast stations, channel 154	QSX 16765.0 kHz
	OST 60	Oostende R, BEL	SITOR-A: 0715-2017 tts CW
16883.5		coast stations, channel 155	QSX 16765.5 kHz
16884.0		coast stations, channel 156	QSX 16766.0 kHz
16884.5		coast stations, channel 157	QSX 16766.5 kHz
16885.0		coast stations, channel 158	QSX 16767.0 kHz
16885.5		coast stations, channel 159	QSX 16767.5 kHz
16886.0		coast stations, channel 160	QSX 16768.0 kHz
	TAH	Istanbul R, TUR	SITOR-A: 1807 tts
16886.5		coast stations, channel 161	QSX 16768.5 kHz
16887.0		coast stations, channel 162	QSX 16769.0 kHz
	LZW 68	*Varna R, BUL*	*scheduled*
16887.5		coast stations, channel 163	QSX 16769.5 kHz
16888.0		coast stations, channel 164	QSX 16770.0 kHz
16888.5		coast stations, channel 165	QSX 16770.5 kHz
16889.0		coast stations, channel 166	QSX 16771.0 kHz
	XSG	*Shanghai R, CHN*	*scheduled*
16889.5		coast stations, channel 167	QSX 16771.5 kHz
16890.0		coast stations, channel 168	QSX 16772.0 kHz
16890.5		coast stations, channel 169	QSX 16772.5 kHz
16891.0		coast stations, channel 170	QSX 16773.0 kHz
16891.5		coast stations, channel 171	QSX 16773.5 kHz
16892.0		coast stations, channel 172	QSX 16774.0 kHz
	XSG	Shanghai R, CHN	SITOR-A: 0042-1454 + 2222 tts CW
16892.5		coast stations, channel 173	QSX 16774.5 kHz
16893.0		coast stations, channel 174	QSX 16775.0 kHz
	USU	Mariupol R, UKR	SITOR-A: 0627-2004 R tts wtsca CW
16893.5		coast stations, channel 175	QSX 16775.5 kHz
16894.0		coast stations, channel 176	QSX 16776.0 kHz
16894.5		coast stations, channel 177	QSX 16776.5 kHz
16895.0		coast stations, channel 178	QSX 16777.0 kHz
16895.5		coast stations, channel 179	QSX 16777.5 kHz
16896.0		coast stations, channel 180	QSX 16778.0 kHz
16896.5		coast stations, channel 181	QSX 16778.5 kHz
16897.0		coast stations, channel 182	QSX 16779.0 kHz
16897.5		coast stations, channel 183	QSX 16779.5 kHz
16898.0		coast stations, channel 184	QSX 16780.0 kHz
	XSG	Shanghai R, CHN	SITOR-A: 0424 tts
16898.5		coast stations, channel 185	QSX 16780.5 kHz
	UAT	Moscow R, RUS	SITOR-A: 0635 + 0738 + 1423 R tts wtsca SITOR-B: 0400 tfc list CW
16899.0		coast stations, channel 186	QSX 16781.0 kHz
16899.5		coast stations, channel 187	QSX 16781.5 kHz
16900.0		coast stations, channel 188	QSX 16782.0 kHz
16900.5		coast stations, channel 189	QSX 16782.5 kHz
16901.0		coast stations, channel 190	QSX 16783.0 kHz
	4PB	*Colombo R, SLK*	*scheduled*
16901.5		coast stations, channel 191	QSX 16783.5 kHz
	LZW 69	*Varna R, BUL*	*scheduled*
16902.0		coast stations, channel 192	QSX 16784.0 kHz
	9GP	Tema R, GHA	CW
16902.5		coast stations, channel 193	QSX 16784.5 kHz
16903.0	WORLDWIDE	COAST STATIONS DSC FREQUENCY	QSX 16805.0 kHz
16903.5	WORLDWIDE	COAST STATIONS DSC FREQUENCY	
16904.0	WORLDWIDE	COAST STATIONS DSC FREQUENCY	

16904.3		*Victoria Harbour Meteo, HKG*	*FAX 120/576: 0800 AWPN/ FWPN MFC, 0815+0830+ 1130+1155 charts*
16904.9	WCC	Chatham R, MA, USA	CW
16905.0	**FUV**	**FN Jibuti, DJI**	**ITA2 75 Bd: 0300-1940 ry**
16906.0	YIR	Basrah R, IRQ	CW
16908.0	PPO	Olinda R, B	CW
	TAD	**MFA Ankara, TUR**	**FEC-A 144 Bd: 0813 clg TAD 42, 1020 msg (Turkish + E nx), 1433 tfc, 1455 msg (5lgs) + final tfc to TAD 54, tfc to TAD 50 and TAD 42**
		Turkish E Addis Ababa, ETH	**FEC-A 144 Bd: 1427 msg to TAD Ankara**
16909.7	USO	Izmail R, UKR	CW
16910.0	HLJ	Soul R, KOR	CW
	JYO	Aqaba R, JOR	CW
16911.0	JNA	JN Tokyo, J	CW
16912.0	A3A	Nuku'alofa R, TON	CW
16912.5	SUH 5	Alexandria R, EGY	CW
16914.0		**UNID teleprinter**	**75**
16914.5	CBV	Valparaiso R, CHL	CW
	SPB 83	***Szczecin R, POL***	***scheduled; QSX 16787.5 kHz***
	XDA	Mexico City R, MEX	CW
16915.0	**FUX**	**FN Le Port, REU**	**ITA2 75 Bd: 1041-1525 ry**
16916.5	WSC	Tuckerton R, NJ, USA	CW
	XSG	Shanghai R, CHN	CW
16918.0	LZW	Varna R, BUL	CW
	PPJ	Juncao R, B	CW
16918.2	**GYA**	**RN London, G**	**ITA2 75 Bd: 1606 channel status**
16918.8	GKJ 6	Portishead R, G	CW
	VIX 6	RAN Canberra, ACT, AUS	CW
16920.0	OXZ 81	Lyngby R, DNK	CW
	9GX	Tema R, GHA	CW
16921.0	CLS	Habana R, CUB	CW
16922.0	**'RBSL'**	**IN Mumbai, IND**	**ITA2 50 Bd: 0312-1325 ry**
16923.8	OFJ 7	Helsinki R, FIN	CW
16925.6	L2C	ACG Buenos Aires, ARG	CW
16927.0	**UIW**	**Kaliningrad R, RUS**	**ITA2 50 Bd: 0807-1836 ry or R tts wtsca**
16927.5	XFE	Ensenada R, MEX	CW
16928.4	ZAD 2	Durres R, ALB	CW
16930.0	UVA	Gelendhzik R, RUS	CW
16930.4	5RS	Toamasina R, MDG	CW
	9MR	**MN Johor Baharu, MLA**	**ITA2 75 Bd: 1617-0834 ry**
16930.8	ELZ	Cape Palmas R, LBR	CW
16932.0	7TF 10	Boufarik R, ALG	CW
16933.0	OBY	Paita R, PRU	CW
16933.2	JOS	Nagasaki R, J	CW
	WCC	Chatham R, MA, USA	CW
16935.0	A7D	Doha R, QAT	CW
16935.5	XFA	Acapulco R, MEX	CW
16936.9		**RN Preston, G**	**ITA2 100 Bd: 1042+1254+ 1324+1940 encrypted tfc**
16938.0	VTG 8	IN Mumbai, IND	CW
16940.0	XSW	Kao-hsiung R, TAI	CW
16942.5	XDA	Mexico City R, MEX	CW
	9AR	Rijeka R, HRV	CW
16942.8	EDF 5	Madrid R, E	CW
16944.0	LZL 6	Bourgas R, BUL	CW

16945.0	XVG 7	Hai Phong R, VTN	CW
16947.0	UUI	Odessa R, UKR	CW
16947.6	CBV	Valparaiso R, CHL	CW
	FFT 8	Saint Lys R, F	CW
	6VA 7	Dakar R, SEN	CW
	6YI	Kingston R, JMC	CW
	8PO	Bridgetown R, BRB	CW
	8RB	Demerara R, GUY	CW
16947.8	TUA 9	Abidjan R, CTI	CW
16948.0	HCG	Guayaquil R, EQA	CW
16949.0	UPW	Liepaja R, LVA	CW
16950.0	XSQ	Guangzhou R, CHN	CW
	XVS	Ho Chi Minh Ville R, VTN	CW
	9MB 6	MN Georgetown, P.I., MLA	CW
16951.3		**UNID teleprinter**	**100**
16951.5	**6WW**	**FN Dakar, SEN**	**ITA2 75 Bd: 24 h ry**
16953.0	HZG	Dammam R, ARS	CW
16954.4	GKC 6	Portishead R, G	CW
16955.0	**YLQ**	**Riga R, LVA**	**SITOR-A: 0714-1916 R tts wtsca SITOR-B: 0908 R tts wtsca, 1130 navigational warnings. 1415 tfc list, 1425+1432+1938 R tts wtsca** CW
16956.0	CBV	Valparaiso R, CHL	CW
	PZN 26	Paramaribo R, SUR	CW
	XVS	Ho Chi Minh Ville R, VTN	CW
16958.0	**FUJ**	**FN Noumea, NCL**	**ITA2 75 Bd: 0010-1004 ry**
16959.0	**FUM**	**FN Papeete, Tahiti, OCE**	**ITA2 75 Bd: 1800 ry**
	HML	Namp'o R, KRE	CW
16960.0	**CKN**	**CF Victoria, BC, CAN**	**ITA2 75 Bd: 0700 msg**
	UHS	Murmansk R, RUS	CW
16961.0	CLA 40	Habana R, CUB	CW
16961.5	**FUF**	**FN Fort de France, MRT**	**ITA2 75 Bd: 1042-2155 ry**
16963.0	**TAD**	**MFA Ankara, TUR**	**FEC-A 144 Bd: 1150 operational msg**
	UIW	**Kaliningrad R, RUS**	**ITA2 50 Bd: 1150+1411+1730 R tts wtsca; QSX 16623.5 kHz** CW
16966.0	SVB 6	Athens R, GRC	CW
	S9M	Sao Tome R, STP	CW
16966.5	9VG 58	Singapore R, SNG	CW
16968.0	PPL	Belem R, B	CW
16968.8	XSJ	Zhanjiang R, CHN	CW
16969.0	WLO	Mobile R, AL, USA	CW
16970.0	OBQ	Iquitos R, PRU	CW
	UGC	**Saint Petersburg R, RUS**	**ITA2 50 Bd: 0714 R tts wtsca**
	UQB	Kholmsk R, FE, RUS	CW
16971.0	*JJC*	*KYODO Tokyo, J*	*FAX // 4316.0 kHz $*
16972.0	WCC	Chatham R, MA, USA	CW
16973.4	DZE	Mandaluyong R, PHL	CW
16973.5	WCC	Chatham R, MA, USA	CW
16974.0	SPE 81	Szczecin R, POL	CW
16974.6	GKD 6	Portishead R, G	CW
16975.0	RKLM	Arkhangelsk R, RUS	CW
	VWM	Madras R, IND	CW
16976.8	JF.	many F R stations, J	CW
16977.0	OLP	Prague R, CZE	CW
16978.4	3BM 6	Port Louis R, MAU	CW

16980.0	**UGW**	**Novorossiysk R, RUS**	**ITA2 50 Bd: 1230-2010 R tts wtsca** CW
16981.5	SVG 6	Athens R, GRC	CW
16983.0	ELC	Monrovia R, LBR	CW
16984.0	PPR	Rio de Janeiro R, B	CW
16986.0	CTP	NATO Lisbon, POR	CW
16987.0	VRX	Victoria Harbour R, HKG	CW
16989.5		**UNID teleprinter**	**150**
16990.0	HLO	Soul R, KOR	CW
	UFH	Petropavl.-Km. R, FE, RUS	CW
16991.0	PPR	Rio de Janeiro R, B	CW
16992.8	UAT	Moscow R, RUS	CW
16994.0	9VG 22	Singapore R, SNG	CW
16995.0	SVF 6	Athens R, GRC	CW
	9KK 22	Safat R, KWT	CW
16996.0	CLA 83	Habana R, CUB	CW
16997.0	YLQ	Riga R, LVA	CW
16997.6	**WLO**	**Mobile R, AL, USA**	**SITOR-B: H+35 tfc list, wx** CW
16998.5	JDC	Choshi R, J	CW
17002.0	PPL	Belem R, B	CW
17002.4	CBV	Valparaiso R, CHL	CW
	VHC	RAN Canberra, ACT, AUS	COMB
	XSG	Shanghai R, CHN	CW
17004.0	HKB	Barranquilla R, CLM	CW
17005.0	IAR	Rome R, I	CW
17007.7	KLB	Seattle R, WA, USA	CW
17008.8	TAH	Istanbul R, TUR	CW
17010.0	PPO	Olinda R, B	CW
	UGC	**Saint Petersburg R, RUS**	**ITA2 50 Bd: 0705-1728 R tts wtsca** CW
17011.0	XSX	Chi-lung R, TAI	CW
17012.0	PPJ	Juncao R, B	CW
17013.0	5BA	Nicosia R, CYP	CW
17014.0	JF.	many F R stations, J	CW
	UTM	Feodosiya R, UKR	CW
17015.0	OBF	Mollendo R, PRU	CW
	UTQ	Kiyev R, UKR	CW
17016.0	SPH 82	Gdynia R, POL	CW
17016.5	KPH	San Francisco R, CA, USA	CW
17018.0	**EBA**	**SN Madrid, E**	**ITA2 75 Bd: 1005+1020+1700+1956 msg (navigational warnings)** CW
17020.0	**UDK**	**Murmansk R, RUS**	**ITA2 50 Bd: 0812-2230 R tts wtsca** CW
	UFJ	Rostov-na-Donu R, RUS	CW
17021.6	TAH	Istanbul R, TUR	CW
17022.5	**WLO**	**Mobile R, AL, USA**	**SITOR-B: H+35 tfc list, wx** CW
17023.0	CLA 84	Habana R, CUB	CW
	PPR	Rio de Janeiro R, B	CW
17024.0	**SAB 83**	**Goeteborg R, S**	**SITOR-A: 0508-2118 tts; QSX 16790.5 kHz** **SITOR-B: 1700 Swedish nx**
17025.0	RFA	Astrakhan' R, RUS	CW
17026.0	KFS	San Francisco R, CA, USA	CW

17027.0	FFL 8	Saint Lys R, F	CW
17027.5	HPP	Panama R, PNR	CW
17029.0	JMC 6	Tokyo Meteo, J	CW
17030.0	XSG	Shanghai R, CHN	CW
17033.0	**UKW**	**Korsakov R, FE, RUS**	**ITA2 50 Bd: 0016+0740+0747 R tts wtsca**
17034.0	VWB	Mumbai R, IND	CW
17035.0	UFH	Petropavl.-Km. R, FE, RUS	CW
	XSW	Kao-hsiung R, TAI	CW
17036.0	**UCE**	**Arkhangelsk R, RUS**	**ITA2 50 Bd: 0726-1410 R tts wtsca**
17037.0	YQI 6	Constanta R, ROU	CW
17038.0	WNU	Slidell R, LA, USA	CW
17038.5	URL	Sevastopol' R, UKR	CW
17039.0	CBV	Valparaiso R, CHL	CW
17040.0	UFZ	Vladivostok R, SE, RUS	CW
17040.8	FFS 8	Saint Lys R, F	CW
	FJA 26	Papeete R, Tahiti, OCE	CW
17043.2	JCU	Choshi R, J	CW
17045.6	HKC	Buenaventura R, CLM	CW
	LPD 46	General Pacheco R, ARG	CW
	4PB	Colombo R, SLK	CW
	9AR	Rijeka R, HRV	CW
	9MG 11	Georgetown R, Pin. I., MLA	CW
17048.0	DZW	Manila R, PHL	CW
17049.0	**UUI**	**Odessa R, UKR**	**ITA2 50 Bd: 1213-1511 R tts wtsca** CW
17050.0	LYK	Klaipeda R, LTU	CW
	4XZ	IN Haifa, ISR	CW
17050.4	ASK	Karachi R, PAK	CW
17052.5	JNA	JN Tokyo, J	CW
17053.0	XSX	Chi-lung R, TAI	CW
17054.0		**UNID teleprinter**	**ITA2 100 encrypted**
17055.0	LZW 71	Varna R, BUL	CW
	MGJ	**RN Faslane, G**	**ITA2 75 Bd: 1222+1443+1956 channel status**
17055.6	D4A	Mindelo R, S. Vicente, CPV	CW
17060.6		**UNID teleprinter**	**100**
17062.0	HZG	Dammam R, ARS	CW
17063.0	UUI	Odessa R, UKR	CW
17063.3		**UNID teleprinter**	**100**
17064.0	SPH 83	Gdynia R, POL	CW
	UWY	Yalta R, UKR	CW
17064.8	EDZ 6	Madrid R, E	CW
17065.0	UBF	Saint Petersburg R, RUS	CW
17066.0	**UAT**	**Moscow R, RUS**	**ITA2 50 Bd: 0527+1254+1906 R tts wtsca**
17068.4	OXZ 8	Lyngby R, DNK	CW
17069.5	*JJC*	*KYODO Tokyo, J*	*FAX // 4316.0 kHz $*
17070.0	SPE 83	Szczecin R, POL	CW
17072.0	DZE	Mandaluyong R, PHL	CW
	GKG 6	Portishead R, G	CW
17073.9	LGX	Rogaland R, NOR	CW
17074.4	PNK	Jayapura R, INS	CW
17077.0	ESA	Tallinn R, EST	CW
17079.0	HLF	Soul R, KOR	CW
17080.0	XSQ	Guangzhou R, CHN	CW
17084.0	VHI 6	RAN Darwin, NT, AUS	CW
	ZPK	Asuncion R, PRG	CW

17085.0	USU	Mariupol R, UKR	CW
17087.0	PPR	Rio de Janeiro R, B	CW
17088.8	KPH	San Francisco R, CA, USA	CW
17090.0	UAI	Nakhodka R, SE, RUS	CW
17091.0	XSQ	Guangzhou R, CHN	CW
17092.0	GKH 6	Portishead R, G	CW
17093.0	JOR	Nagasaki R, J	CW
17093.6	AQP 7	PN Karachi, PAK	CW
17094.8	SVA 6	Athens R, GRC	CW
17096.0	VRX	Victoria Harbour R, HKG	CW
17098.4	GKA 6	Portishead R, G	CW
17102.0		**UNID teleprinter**	**T-PLEX 8**
17103.2	XSG	Shanghai R, CHN	CW
17105.0	ESP	Pärnu R, EST	CW
	IRM	CIRM Rome, I	CW
17106.0	7TF 10	Boufarik R, ALG	CW
17106.5	WSC	Tuckerton R, NJ, USA	CW
17106.6		**UNID teleprinter**	**100**
17108.0	**GYU**	**RN Gibraltar, GIB**	**ITA2 75 Bd: 1036 ry**
17110.0	UFL	Vladivostok R, SE, RUS	CW
17112.0	DZP	Novaliches R, PHL	CW
17112.6	JCS	Choshi R, J	CW
17113.0	GKB 6	Portishead R, G	CW
17115.0	UGC	Saint Petersburg R, RUS	CW
17115.5	XFL	Mazatlan R, MEX	CW
17117.6	WNU	Slidell R, LA, USA	CW
17118.0	HLG	Soul R, KOR	CW
17118.5	VHC	RAN Canberra, ACT, AUS	COMB
17120.0	PPO	Olinda R, B	CW
17120.5	XDA	Mexico City R, MEX	CW
17121.0		**UNID teleprinter**	**150**
17122.5	PWZ	BN Rio de Janeiro, B	CW
17124.4	SUH 5	Alexandria R, EGY	CW
17126.0	XSZ	Dalian R, CHN	CW
17128.5	ZLP 6	RNZN Auckland, NZL	CW
17130.0	HLW	Soul R, KOR	CW
17132.0	JF.	many F R stations, J	CW
	VTF 6	IN Mumbai, IND	CW
	XSV	Tianjin R, CHN	CW
17134.0	**LYK**	**Klaipeda R, LTU**	**ITA2 50 Bd: 1902 ry** CW
	XFN	Progreso R, MEX	CW
17135.0	UTQ	Kiyev R, UKR	CW
17136.8	GKM 6	Portishead R, G	CW
17137.0	UHK	Batumi R, GEO	CW
17138.0	LYL	Klaipeda R, LTU	CW
17139.0		**UNID teleprinter**	**ITA2 100 encrypted**
17139.5	7TF 10	Boufarik R, ALG	CW
17140.0	XDA	Mexico City R, MEX	CW
17141.0	**UFN**	**Novorossiysk R, RUS**	**ITA2 50 Bd: 0730-1903 R ry or tts wtsca** CW
17141.6	**USU**	**Mariupol R, UKR**	**ITA2 50 Bd: 0721-1211 R tts wtsca, 1500 R navigational warnings wtsca** CW
	YVG	La Guaira R, VEN	CW
17145.0	LZW 6	Varna R, BUL	CW
17146.4	ELC	Monrovia R, LBR	CW
	NRV	USCG Apra Harbour, GUM	CW

17147.0	**URL**	**Sevastopol' R, UKR**	**ITA2 50 Bd: 0809-1700 R tts wtsca**
			CW
17147.9	5RS	Toamasina R, MDG	CW
17148.0	*NMG*	*USCG N. Orleans, LA, USA*	*FAX // 4316.0 kHz $*
17148.5	7TF 10	Boufarik R, ALG	CW
17150.3	**'CAM'**	**UNID (MOSSAD?) st. (596)**	**VFT: FEC-A 192 Bd: 0800 ry**
17151.2	GKI 6	Portishead R, G	CW
	NMC	*USCG S. Franc., CA, USA*	*FAX // 4346.0 kHz $*
17152.0	DZZ	Manila R, PHL	CW
	UIW	Kaliningrad R, RUS	CW
17153.0	URL	Sevastopol' R, UKR	CW
17155.0	UUI	Odessa R, UKR	CW
17156.0	ASK	Karachi R, PAK	CW
17160.0	DZO	Bulacan R, PHL	CW
	OBC	Callao R, PRU	CW
	PWZ	BN Rio de Janeiro, B	CW
17160.8	IAR	Rome R, I	CW
17162.0	PPO	Olinda R, B	CW
17164.8	ZSC 7	Cape Town R, AFS	CW
17165.6	CLA 41	Habana R, CUB	CW
	3CA 6	Malabo R, GNE	CW
17166.5	JCT	Choshi R, J	CW
17167.5	GKK 6	Portishead R, G	CW
17168.0	DZN	Navotas R, PHL	CW
17169.0	A9M	Hamala R, BHR	CW
17170.0	PPJ	Juncao R, B	CW
	PPL	Belem R, B	CW
17170.4	CNP	Casablanca R, MRC	CW
17171.2	VAI	CCG Vancouver, BC, CAN	CW
17171.7		**MFA Cairo, EGY**	**SITOR-A: 0955 + 1040 ATU-A tfc**
17173.5	WLO	Mobile R, AL, USA	CW
17175.0	**UFL**	**Vladivostok R, SE, RUS**	**ITA2 50 Bd: 0427 R tts wtsca**
17175.2	A9M	Hamala R, BHR	CW
	EDG 5	Madrid R, E	CW
	VAI	CCG Vancouver, BC, CAN	CW
	5ZF 4	Mombasa R, KEN	CW
	7OA	Aden R, YEM	CW
	9AR	Rijeka R, HRV	CW
	9LL	Freetown R, SRL	CW
17177.0	URK	Kerch R, UKR	CW
	UUI	**Odessa R, UKR**	**ITA2 50 Bd: 1037 R tts wtsca**
			CW
17180.0	**HWN**	**FN Paris, F**	**ITA2 75 Bd: 0954-1905 ry**
17181.0	**YLQ**	**Riga R, LVA**	**ITA2 50 Bd: 0913-1945 ry or R tts wtsca**
			CW
17182.0	LZL 6	Bourgas R, BUL	CW
17184.0	DZK	Bulacan R, PHL	CW
17184.8	EAD 5	Madrid R, E	CW
	KFS	San Francisco R, CA, USA	CW
	PKA	Sabang R, INS	CW
	PKE	Amboina R, INS	CW
	PKP	Dumai R, INS	CW
	9PA	Banana R, ZAI	CW
	9YL	North Post R, TRD	CW
17188.0	SVD 6	Athens R, GRC	CW
17189.6	D3E 71	Luanda R, AGL	CW
	XYR 9	Yangon R, MYA	CW
17190.5	UHK	Batumi R, GEO	CW

17192.0	VRX	Victoria Harbour R, HKG	CW	
	3AC 17	Monte Carlo R, MCO	CW	
17194.0	C2N	Makwa R, NRU	CW	
17194.4	PPR	Rio de Janeiro R, B	CW	
	SVI 6	Athens R, GRC	CW	
17195.0	UJE	Moscow R, RUS	CW	
17195.5	LPD 25	General Pacheco R, ARG	CW	
17198.3	HZG	Dammam R, ARS	CW	
17198.9	PCH 60	Scheveningen R, NLD	CW	
17199.0	5OW	Lagos R, NIG	CW	
17203.9	OXZ 82	Lyngby R, DNK	CW	
17204.0	ZPK	Asuncion R, PRG	CW	
17206.1	IAR	Rome R, I	CW	
17210.6	ZSC 39	Cape Town R, AFS	CW	
17213.5	UIW	Kaliningrad R, RUS	CW	
17213.9	SPH 81	Gdynia R, POL	CW	
17215.0	JDB	Nagasaki R, J	CW	
17216.9	XSQ	Guangzhou R, CHN	CW	
17217.4	7TF 10	Boufarik R, ALG	CW	
17220.5	JOU	Nagasaki R, J	CW	
17221.4	A7D	Doha R, QAT	CW	
17223.4	A4M	Muscat R, OMA	CW	
17223.5	PPL	Belem R, B	CW	
17223.7		**UNID teleprinter**	**100**	
17226.5	PPJ	Juncao R, B	CW	
17227.6	ZLO 6	RNZN Auckland, NZL	CW	
17228.0	URL	Sevastopol' R, UKR	CW	
	ZPK	Asuncion R, PRG	CW	
17228.7		**MFA Pyongyang, KRE**	**ITA2 50 Bd: 1345 msgs (5fgs)**	
17230.0	CWA	Cerrito R, URG	CW	
17231.0	JF.	many F R stations, J	CW	
17231.4	UIW	Kaliningrad R, RUS	CW	
17232.4	HPP	Panama R, PNR	CW	
17232.9	9VG 53	Singapore R, SNG	CW	
17233.9	UCE	Arkhangelsk R, RUS	CW	
17236.5	UIW	Kaliningrad R, RUS	CW	
17237.0	TJC 9	Douala R, CME	CW	
17238.9	XSV	Tianjin R, CHN	CW	
17239.7	PKB	Belawan R, INS	CW	
	PKD	Surabaya R, INS	CW	
	PKX	Jakarta R, INS	CW	
	SPE 83	Szczecin R, POL	CW	
	WNU	Slidell R, LA, USA	CW	
17242.0		coast stations, ch 1601	SSB	QSX 16360.0 kHz
	LPL	General Pacheco R, ARG		
	S7Q	Victoria R, Mahe, SEY		
	UDN	Novorossiysk R, RUS		
	UIW	Kaliningrad R, RUS		
	WOM	Miami R, FL, USA		
17245.0		coast stations, ch 1602	SSB	QSX 16363.0 kHz
	GKT 62	Portishead R, G		
	HZG	Dammam R, ARS		
	KMI	Dixon R, CA, USA		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		

17248.0		coast stations, ch 1603	SSB	QSX 16366.0 kHz
	BVA	T'ai-pei R, TAI		
	DXF	Davao R, PHL		
	IAR	Rome R, I		
	KMI	Dixon R, CA, USA		
	LPL	General Pacheco R, ARG		
	OXZ	Lyngby R, DNK		
	S3D	Chittagong R, BGD		
	XSQ	Guangzhou R, CHN		
	5BA 62	Nicosia R, CYP		
17251.0		coast stations, ch 1604	SSB	QSX 16369.0 kHz
	FFL 83	Saint Lys R, F		
	JBO	Tokyo R, J		
	LFN 4	Rogaland R, NOR		
	SVN 61	Athens R, GRC		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	XDA	Mexico City R, MEX		
	XFA	Acapulco R, MEX		
	XFK	La Paz R, MEX		
	XFM	Manzanillo R, MEX		
	XFP	Chetumal R, MEX		
17254.0		coast stations, ch 1605	SSB	QSX 16372.0 kHz
	DZI	Bacoor R, PHL		
	DZO	Bulacan R, PHL		
	DZZ	Manila R, PHL		
	FFL 86	Saint Lys R, F		
	FJA	Papeete R, Tahiti, OCE		
	LFN 5	Rogaland R, NOR		
	OXZ	Lyngby R, DNK		
	SAG	Goeteborg R, S		
	UGC	Saint Petersburg R, RUS		
	WOO	Ocean Gate R, NJ, USA		
17257.0		coast stations, ch 1606	SSB	QSX 16375.0 kHz
	DXT	Cagayan R, PHL		
	GKT 66	Portishead R, G		
	IAR	Rome R, I		
	JBO	Tokyo R, J		
	PPO	Olinda R, B		
	S3E	Khulna R, BGD		
	TAF	Samsun R, TUR		
	TAH	Istanbul R, TUR		
	TFA	Reykjavik R, ISL		
	UAT	Moscow R, RUS		
17260.0		coast stations, ch 1607	SSB	QSX 16378.0 kHz
	LFN 6	Rogaland R, NOR		
	SPW 81	Warsaw R, POL		
	UIK	Vladivostok R, SE, RUS		
	WLO	Mobile R, AL, USA		
	3AC 16	Monte Carlo R, MCO		
17263.0		coast stations, ch 1608	SSB	QSX 16381.0 kHz
	BVA	T'ai-pei R, TAI		
	IAR	Rome R, I		
	OBC	Callao R, PRU		
	PZN	Paramaribo R, SUR		
	SAG	Goeteborg R, S		

17263.0	VAI	CCG Vancouver, BC, CAN		
	XSG	Shanghai R, CHN		
	ZSC 28	Cape Town R, AFS		
17266.0		coast stations, ch 1609	SSB	QSX 16384.0 kHz
	DXR	Davao R, PHL		
	HZG	Dammam R, ARS		
	JBO	Tokyo R, J		
	OSU 64	Oostende R, BEL		
	SVN 62	Athens R, GRC		
	UHY	Murmansk R, RUS		
	WOM	Miami R, FL, USA		
	4XO	Haifa R, ISR		
17269.0		coast stations, ch 1610	SSB	QSX 16387.0 kHz
	BVA	T'ai-pei R, TAI		
	CWF	Punta Carretas R, URG		
	PKX	Jakarta R, INS		
	SUH	Alexandria R, EGY		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	WOM	Miami R, FL, USA		
	XSV	Tianjin R, CHN		
17272.0		coast stations, ch 1611	SSB	QSX 16390.0 kHz
	GKU 61	Portishead R, G		
	HEB 17	Berne R, SUI		
	PPR	Rio de Janeiro R, B		
	TAH	Istanbul R, TUR		
	TAM	Mersin R, TUR		
	WOM	Miami R, FL, USA		
	5AT	Tripoli R, LBY		
	9AR	Rijeka R, HRV		
	9MG 38	Georgetown R, Pin. I., MLA		
17275.0		coast stations, ch 1612	SSB	QSX 16393.0 kHz
	ASK	Karachi R, PAK		
	CLA 73	Habana R, CUB		
	JYO	Aqaba R, JOR		
	UHS	Murmansk R, RUS		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	3AC	Monte Carlo R, MCO		
17278.0		coast stations, ch 1613	SSB	QSX 16396.0 kHz
	OSU 63	Oostende R, BEL		
	PPR	Rio de Janeiro R, B		
	UCZ	Provideniya R, FE, RUS		
	UEO	Nakhodka R, SE, RUS		
	YQI 61	Constanta R, ROU		
17281.0		coast stations, ch 1614	SSB	QSX 16399.0 kHz
	BVA	T'ai-pei R, TAI		
	IAR	Rome R, I		
	OHG 2	Helsinki R, FIN		
	OXZ	Lyngby R, DNK		
	SAG	Goeteborg R, S		
	XDA	Mexico City R, MEX		

17281.0	XFC	Cozumel R, MEX		
	XSQ	Guangzhou R, CHN		
	8Q2	Male R, MLD		
17284.0		coast stations, ch 1615	SSB	QSX 16402.0 kHz
	CUL	Lisbon R, POR		
	DYO	Cebu R, PHL		
	DZM	Bulacan R, PHL		
	D4A	Mindelo R, S. Vicente, CPV		
	GNI	Niton R, G		
	HEB 27	Berne R, SUI		
	HPP 20	Panama R, PNR		
	J5M	Bissau R, GNB		
	TFA	Reykjavik R, ISL		
	UBE	Petropavl.-Km. R, FE, RUS		
17287.0		coast stations, ch 1616	SSB	QSX 16405.0 kHz
	IAR	Rome R, I		
	KMI	Dixon R, CA, USA		
	WOM	Miami R, FL, USA		
17290.0		coast stations, ch 1617	SSB	QSX 16408.0 kHz
	OXZ	Lyngby R, DNK		
	PPJ	Juncao R, B		
	SVN 63	Athens R, GRC		
	S3D	Chittagong R, BGD		
	VCT	Tors Cove R, NFLD, CAN		
	XFN	Progreso R, MEX		
	4XO	Haifa R, ISR		
17293.0		coast stations, ch 1618	SSB	QSX 16411.0 kHz
	A3A	Nuku'alofa R, TON		
	A9M	Hamala R, BHR		
	GKU 68	Portishead R, G		
	JFA	Funabashi F R, J		
	LPG	Rio Gallegos R, ARG		
	OXZ	Lyngby R, DNK		
	S9M	Sao Tome R, STP		
	TAH	Istanbul R, TUR		
	TAN	Izmir R, TUR		
17296.0		coast stations, ch 1619	SSB	QSX 16414.0 kHz
	DZM	Bulacan R, PHL		
	FFL 84	Saint Lys R, F		
	LFN 23	Rogaland R, NOR		
	OBF	Mollendo R, PRU		
	9KK 21	Safat R, KWT		
17299.0		coast stations, ch 1620	SSB	QSX 16417.0 kHz
	LFN 24	Rogaland R, NOR		
	TAL	Antalya R, TUR		
	WOO	Ocean Gate R, NJ, USA		
	5AB	Benghazi R, LBY		
17302.0		coast stations, ch 1621 (WORLDWIDE CALLING FREQ.)	SSB	QSX 16420.0 kHz
17305.0		coast stations, ch 1622	SSB	QSX 16423.0 kHz
	FFL 85	Saint Lys R, F		
	HEB 47	Berne R, SUI		
	HPP 20	Panama R, PNR		
	OXZ	Lyngby R, DNK		
	SVN 64	Athens R, GRC		
	S3D	Chittagong R, BGD		
	VIB	Brisbane R, QLD, AUS		
	VID	Darwin R, NT, AUS		
	VIM	Melbourne R, VIC, AUS		
	VIP	Perth R, WA, AUS		

17305.0	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	9GX	Tema R, GHA		
	9KK 22	Safat R, KWT		
17308.0		coast stations, ch 1623	SSB	QSX 16426.0 kHz
	BVA	T'ai-pei R, TAI		
	D4D	Praia R, Santiago, CPV		
	GKV 63	Portishead R, G		
	UTQ	Kiyev R, UKR		
	UTT	Odessa R, UKR		
	XSG	Shanghai R, CHN		
	ZPD	Asuncion R, PRG		
17311.0		coast stations, ch 1624	SSB	QSX 16429.0 kHz
	IAR	Rome R, I		
	KMI	Dixon R, CA, USA		
	LYL	Klaipeda R, LTU		
	S3E	Khulna R, BGD		
	UIW	Kaliningrad R, RUS		
	YLQ	Riga R, LVA		
	5WA	Apia R, SMO		
17314.0		coast stations, ch 1625	SSB	QSX 16432.0 kHz
	NMC	USCG S. Franc., CA, USA		
	OSU 61	Oostende R, BEL		
	SPO 81	Szczecin R, POL		
	SVN 63	Athens R, GRC		
	TFA	Reykjavik R, ISL		
17317.0		coast stations, ch 1626	SSB	QSX 16435.0 kHz
	A3A	Nuku'alofa R, TON		
	A7D	Doha R, QAT		
	CLA 72	Habana R, CUB		
	SVN 64	Athens R, GRC		
	UFO	Kholmsk R, FE, RUS		
	UGE	Arkhangelsk R, RUS		
	WOO	Ocean Gate R, NJ, USA		
	YIR	Basrah R, IRQ		
17320.0		coast stations, ch 1627	SSB	QSX 16438.0 kHz
	DYK	Dumaguete R, PHL		
	LYL	Klaipeda R, LTU		
	OBQ	Iquitos R, PRU		
	OSU 62	Oostende R, BEL		
	9AR	Rijeka R, HRV		
17323.0		coast stations, ch 1628	SSB	QSX 16441.0 kHz
	CLA 75	Habana R, CUB		
	FFL 81	Saint Lys R, F		
	S3D	Chittagong R, BGD		
17326.0		coast stations, ch 1629	SSB	QSX 16444.0 kHz
	LFN 27	Rogaland R, NOR		
	SVN 66	Athens R, GRC		
	XYR	Yangon R, MYA		
	6VA	Dakar R, SEN		
	7TF 45	Boufarik R, ALG		
17329.0		coast stations, ch 1630	SSB	QSX 16447.0 kHz
	EHY	Madrid R, E		
	OSU 67	Oostende R, BEL		
	TFA	Reykjavik R, ISL		
	UFA	Batumi R, GEO		
	YLQ	Riga R, LVA		
17332.0		coast stations, ch 1631	SSB	QSX 16450.0 kHz
	BVA	T'ai-pei R, TAI		
	HEB 37	Berne R, SUI		

17332.0	LZW 73	Varna R, BUL		
	SPC 82	Gdynia R, POL		
	WOO	Ocean Gate R, NJ, USA		
	XSU	Yantai R, CHN		
	7TF 46	Boufarik R, ALG		
17335.0		coast stations, ch 1632	SSB	QSX 16453.0 kHz
	CUL	Lisbon R, POR		
	GKW 62	Portishead R, G		
	JBO	Tokyo R, J		
	S3D	Chittagong R, BGD		
	5BA 64	Nicosia R, CYP		
	5RS	Toamasina R, MDG		
17338.0		coast stations, ch 1633	SSB	QSX 16456.0 kHz
	BVA	T'ai-pei R, TAI		
	FFL 82	Saint Lys R, F		
	PPL	Belem R, B		
	SPC 83	Gdynia R, POL		
	UBJ	Baku R, AZE		
	XSV	Tianjin R, CHN		
	ZSC	Cape Town R, AFS		
17341.0		coast stations, ch 1634	SSB	QSX 16459.0 kHz
	EHY	Madrid R, E		
	HLS	Soul R, KOR		
	PPO	Olinda R, B		
	SVN 67	Athens R, GRC		
	TUA	Abidjan R, CTI		
17344.0		coast stations, ch 1635	SSB	QSX 16462.0 kHz
	D3E	Luanda R, AGL		
	D4A	Mindelo R, S. Vicente, CPV		
	J5M	Bissau R, GNB		
	LZW 74	Varna R, BUL		
	OXZ	Lyngby R, DNK		
	S3E	Khulna R, BGD		
	YKM 7	Al Ladhiqiyah R, SYR		
		many RAN stations, AUS		
17347.0		coast stations, ch 1636	SSB	QSX 16465.0 kHz
	PCG 61	Scheveningen R, NLD		
	7TF 47	Boufarik R, ALG		
17350.0		coast stations, ch 1637	SSB	QSX 16468.0 kHz
	EHY	Madrid R, E		
	GKW 67	Portishead R, G		
	HLS	Soul R, KOR		
	VRX	Victoria Harbour R, HKG		
	ZLA	Awanui R, NZL		
	5RS	Toamasina R, MDG		
17353.0		coast stations, ch 1638	SSB	QSX 16471.0 kHz
	CNP	Casablanca R, MRC		
	DZJ	Bulacan R, PHL		
	KUQ	Pago Pago R, SMA		
	LZR	Ruse R, BUL		
	OHG 2	Helsinki R, FIN		
	SPO 82	Szczecin R, POL		
	S9M	Sao Tome R, STP		
	YUW	Bar R, SRB		
17356.0		coast stations, ch 1639	SSB	QSX 16474.0 kHz
	DZK	Bulacan R, PHL		
	EHY	Madrid R, E		
	PCG 62	Scheveningen R, NLD		
	ZAD	Durres R, ALB		
	8Q2	Male R, MLD		

17356.0	9PA	Banana R, ZAI	
17359.0		coast stations, ch 1640	SSB QSX 16477.0 kHz
	ESA	Tallinn R, EST	
	GKW 60	Portishead R, G	
	SVN 68	Athens R, GRC	
	4PB	Colombo R, SLK	
	8PO	Bridgetown R, BRB	
17362.0		coast stations, ch 1641	SSB QSX 16480.0 kHz
	SAG	Goeteborg R, S	
	UTW	Mariupol R, UKR	
	WLO	Mobile R, AL, USA	
	YIR	Basrah R, IRQ	
	7TF 48	Boufarik R, ALG	
	9VG 69	Singapore R, SNG	
17365.0		coast stations, ch 1642	SSB QSX 16483.0 kHz
	FFL 87	Saint Lys R, F	
	HKB	Barranquilla R, CLM	
	HKC	Buenaventura R, CLM	
	KEJ	Hoolehua R, HWA	
	VZX	Penta R, Gosf., NSW, AUS	
17368.0		coast stations, ch 1643	SSB QSX 16486.0 kHz
	A7D	Doha R, QAT	
	FFL 88	Saint Lys R, F	
	HKB	Barranquilla R, CLM	
	HKC	Buenaventura R, CLM	
	WLO	Mobile R, AL, USA	
17371.0		coast stations, ch 1644	SSB QSX 16489.0 kHz
	WNU	Slidell R, LA, USA	
17374.0		coast stations, ch 1645	SSB QSX 16492.0 kHz
	A4M	Muscat R, OMA	
	KGN	Delcambre R, LA, USA	
	LSD 836	Buenos Aires R, ARG	
17377.0		coast stations, ch 1646	SSB QSX 16495.0 kHz
	IAR	Rome R, I	
	KFS	San Francisco R, CA, USA	
17380.0		coast stations, ch 1647	SSB QSX 16498.0 kHz
	DYC	Cebu R, PHL	
	VCT	Tors Cove R, NFLD, CAN	
	WLO	Mobile R, AL, USA	
17383.0		coast stations, ch 1648	SSB QSX 16501.0 kHz
17384.0	'TNNR'	French E Antananarivo, MDG	ARQ6-90 200 Bd: 0740 msg (5lgs) to 'P6Z' Paris, 1226 tfc to 'P6Z'
17386.0		coast stations, ch 1649	SSB QSX 16504.0 kHz
	LZW 75	Varna R, BUL	
	PPR	Rio de Janeiro R, B	
	5BA	Nicosia R, CYP	
17387.0	'6XM8'	BNDVB Bonn, D	ARQ-E 288 Bd: 1305 encrypted tfc to 'C37A' MOSSAD Tel Aviv
17389.0		coast stations, ch 1650	SSB QSX 16507.0 kHz
	EHY	Madrid R, E	
	LSD 836	Buenos Aires R, ARG	
	SVN 61	Athens R, GRC	
	VRX	Victoria Harbour R, HKG	
17392.0		coast stations, ch 1651	SSB QSX 16510.0 kHz
17395.0		coast stations, ch 1652	SSB QSX 16513.0 kHz
	DZD	Manila R, PHL	
	JNA	JN Tokyo, J	
	9AR	Rijeka R, HRV	

17398.0		coast stations, ch 1653	SSB QSX 16516.0 kHz
	EHY	Madrid R, E	
	PPL	Belem R, B	
	XSQ	Guangzhou R, CHN	
	'TNNR'	French E Antananarivo, MDG	ARQ6-90 200 Bd: 0740 msg (5lgs) to 'P6Z' Paris
17400.0	5ST 83	Antananarivo Meteo, MDG	ITA2 100 Bd: 0356 wx, 1240 ry
17401.0		coast stations, ch 1654	SSB QSX 16519.0 kHz
	JNA	JN Tokyo, J	
	UUI	Odessa R, UKR	
17404.0		coast stations, ch 1655	SSB QSX 16522.0 kHz
	EHY	Madrid R, E	
	SVN 62	Athens R, GRC	
17407.0		coast stations, ch 1656	SSB QSX 16525.0 kHz
	HEB 57	Berne R, SUI	

17410.0 - 17480.0 FIXED

17411.0	DMK	MFA Bonn, D	ARQ-E 96 Bd: 0840 encrypted tfc to Tehran, 0910 "quittungsfernschreiben" to Tehran
		Polish E Delhi, IND	POL-ARQ 100 Bd: 1015+1051 msg (5lgs) to SNN 299 Warsaw
17416.9	SAM	MFA Stockholm, S	SWED-ARQ: 1210 msg (5lgs) to SAM 89 Luanda
	SAM 89	Swedish E Luanda, AGL	SWED-ARQ: 1210 tfc to SAM Stockholm
17428.0	CLP 22	Cuban E Hanoi, VTN	ITA2 75 Bd: 1618 msg (5fgs) to CLP 1 Habana
17428.9	SAM	MFA Stockholm, S	SWED-ARQ: 1110 msg to SAM 62 Beijing, 1250 tfc to SAM 59 Hanoi
	SAM 59	Swedish E Hanoi, VTN	SWED-ARQ: 1250 msgs to SAM Stockholm
	SAM 62	Swedish E Beijing, CHN	SWED-ARQ: 1110 tfc to SAM Stockholm
17430.0	*9VF 209*	*KYODO Singapore, SNG*	*FAX // 4316.0 kHz $*
17431.5		MFA Rome, I	SITOR-A: 0857 msg (5lgs) to San'a
17432.0	'DFZG'	MFA Belgrade, SRB	ITA2 75 Bd: 1402-1530 ry or msg (E or Serbian nx) or encrypted msg
17440.0		Sydney Air, NSW, AUS	SSB
17441.5	5YE	Nairobi Meteo, KEN	ITA2 100 Bd: 0357-2200 ry or wx
			CW
17442.0	T3L	PTT Kiritimati, KIR	SSB
	T3T	PTT Bairiki, Tar. At., KIR	SSB
17445.5	*5YE*	*Nairobi Meteo, KEN*	*FAX // 7465.0 kHz $*
17458.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1250 msg (Romanian press review)
17464.7		Egyptian E Conakry, GUI	SITOR-A: 0740-1151 ATU-A msgs to Cairo
		Egyptian E Delhi, IND	SITOR-A: 0620 msg (5lgs) to Cairo
17468.0	HGO 24	MTI Budapest, HNG	ITA2 50 Bd: 0600 E nx

17468.2	'RFFA'	MOD Paris, F	ARQ-M2 200 Bd: A: 0937 msg to 'RFQP' Jibuti, 1210 msgs (5lgs) after "BBBB" + msgs [RQG] B: 0937+1210 msgs (5lgs) after "BBBB" + msgs [RQF, RQG]
17470.0	CLP 1	MFA Habana, CUB	ITA2 50 Bd: 2030 msg (S nx)
17476.7		MFA Cairo, EGY	SITOR-A: 0820-1202 ATU-A tfc or ATU-A msg or msg (5lgs) to Paris

17480.0 - 17550.0 BROADCASTING FIXED

<SSB only, as from 01 April 2007>

17480.2	'RFFVAT'	FF Incirlik, TUR	ARQ-E3 200 Bd: 1200+1220 msg (5lgs) after "BBBB" to 'RFFA' Paris, 1530 tfc to 'RFFA' [FKW]
17484.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 0930+1430 msgs
17510.0	*OXT*	*Copenhagen Meteo, DNK*	*FAX // 5850.0 kHz* $
		UNID teleprinter	300
17512.0	'NCSE'	French E Nicosia, CYP	FEC-A 192 Bd: 0935 msg (5lgs) to 'P6Z' Paris [NCSX]
17518.5	DMK	MFA Bonn, D	ARQ-E 96 Bd: 1600 encrypted msgs to La Paz
17520.0	*HSW 61*	*Bangkok Meteo, THA*	*FAX // 7395.0 kHz* $
17520.5	DMK	MFA Bonn, D	ALIS: 0747 tfc
17521.0	HSW 61	Bangkok Meteo, THA	ITA2 50 Bd: 24 h wx
17526.0	'WJI'	SISMI Udine, I	ARQ-E 96 Bd: 0659 tfc to 'CJL' MOSSAD Tel Aviv ITA2 100 Bd: 0654+1133 clg 'CJL' MOSSAD Tel Aviv
17541.8	8WD 4	MFA Delhi, IND	SITOR-A: 1120 msg to Male
17547.0	HDN	EN Quito, EQA	ITA2 75 Bd: 1240 clg PWX Brasilia, 1400 tfc
17548.5	6MK 58	YONHAP Soul, KOR	CW

17550.0 - 17900.0 BROADCASTING

17550.9	'RFTJ'	FF Dakar, SEN	ARQ-E3 192 Bd: 0506-2025 msgs or operational msg or msg (5lgs) after "BBBB" or "controle de voie" to 'RFFA' Paris [AFL]
17551.5	LQC 28	Buenos Aires TS, ARG	CW
17553.0	9DM 27	Tehran Meteo, IRN	ITA2 50 Bd: 0321-1849 wx
17555.0	ZSO	UNID SAN station (396)	ITA2 75 Bd: 1600 msg (E nx) to NAWS S42D
17573.0		UNID US military station (1196)	HARCO-39 MFSK 200 Bd: 1258 encrypted msgs + tfc
17590.0	HZN 49	Jeddah Meteo, ARS	ITA2 100 Bd: 24 h ry or wx
17616.5	8AA	IN Jakarta, INS	SITOR-A: 0327+0610+0623 msgs

17900.0 - 17970.0 AERONAUTICAL MOBILE (R)

17901.0		AMS = 12	SSB
17904.0		AMS = CEP CWP NP SP, 4	SSB

17907.0		AMS = CAR EA SAM SEA	SSB
17910.0		AMS = 10	SSB
17913.0		AMS = 6G 13	SSB
17916.0		AMS = W I/III	SSB
17919.0		AMS = W II/IV	SSB
17922.0		AMS = W I/III	SSB
17925.0		AMS = W II/V	SSB
17928.0		AMS = W III/IV	SSB
17931.0		AMS = W I/V	SSB
17934.0		AMS = W II/III	SSB
17937.0		AMS = W IV/V	SSB
17940.0		AMS = W II/III	SSB
17943.0		AMS = 6	SSB
17946.0		AMS = NAT, 14	SSB
17949.0		AMS = 5	SSB
17952.0		AMS = 3	SSB
17955.0		AMS = SAT, 6B	SSB
17958.0		AMS = NCA	SSB
17961.0		AMS = AFI EUR INO MID	SSB
17964.0		AMS = 2 11B	SSB
17967.0		AMS = 5 13A 13B 13E 13F	SSB

17970.0 - 18030.0 AERONAUTICAL MOBILE (OR)

17970.0		AMS	SSB
17973.0		AMS	SSB
	AGA	USAF Hickam AFB, HWA	
17976.0		AMS	SSB
	AFA	USAF Andrews, MD, USA	
	AFE	USAF MacDill, FL, USA	
	AFI	USAF McClellan, CA, USA	
	AFS	USAF Offutt AFB, NE, USA	
	AIF	USAF Yokota, J	
	AJE	USAF Croughton, G	
	AJO	USAF Adana, TUR	
	AKA	USAF Elmendorf AFB, ALS	
	XPH	USAF Thule AFB, GRL	
		IAF Pisa, I	
17979.0		AMS	SSB
17982.0		AMS	SSB
	7ZA 222	SAUDIA Jeddah, ARS	
17985.0		AMS	SSB
17988.0		AMS	SSB
17990.0		UNID teleprinter	100
17991.0		AMS	SSB
17994.0		AMS	SSB
	CHR	CF Trenton, ONT, CAN	
	VXA	CF Edmonton, ALTA, CAN	
17997.0		AMS	SSB
18000.0		AMS	SSB
18003.0		AMS	SSB
18004.0	**ZKX**	**RNZAF Auckland, NZL**	**ITA2 75 Bd: 0324 ry**
18005.7		**Egyptian E Muqdisho, SOM**	**SITOR-A: 0650 ATU-A msg to Cairo**
18006.0		AMS	SSB
18009.0		AMS	SSB
	NWC	USN Exmouth, WA, AUS	
18011.7		**Pakistan E Dhaka, BGD**	**SITOR-A: 0330 msgs to Islamabad**

18012.0		AMS	SSB
	CHR	CF Trenton, ONT, CAN	
18013.7	'RFFA'	MOD Paris, F	ARQ-E3 200 Bd: A: 1057-1810 msgs or msgs (5lgs) after "BBBB" to 'RFFVAT' Incirlik [FDX]
18015.0		AMS	SSB
18018.0		AMS	SSB
	AFE	USAF MacDill, FL, USA	
	AFE 83	USAF Wideawake, ASC	
	AFH	USAF A. AFB, Balboa, PNR	
	AXH	RAAF Townsv., QLD, AUS	
	AXI	RAAF Darwin, NT, AUS	
	GFW	RAF Akrotiri, CYP	
	MQP	RAF Upavon, G	
18021.0		AMS	SSB
18023.0	HEE 81	Berne Air, SUI	SSB
18024.0		AMS	SSB
18027.0		AMS	SSB
	CFH	CF Halifax, NS, CAN	
	VXA	CF Edmonton, ALTA, CAN	
18030.0 - 18052.0		FIXED	
18032.5		BDZ Goma, ZAI	ITA2 50 Bd: 1200 + 1434 msgs to Kinshasa
18039.0	CLP 1	MFA Habana, CUB	ITA2 50 Bd: 1300 msg (S press review)
18040.0	TCY 4	AA Ankara, TUR	ITA2 50 Bd: 0700-1100 E nx, 1100-1300 Turkish nx, 1300-1330 E nx, 1330-1600 Turkish nx
	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 0900 msg (Bulgarian nx)
18040.5	HGX 21	MFA Budapest, HNG	DUP-ARQ: 1003-1747 tfc or msg (5lgs) to HGX 38 Vientiane or HGX 42 Tehran or Safat
18040.9	HGX 38	Hungarian E Vientiane, LAO	DUP-ARQ: 1456 tfc to HGX 21 Budapest
	HGX 42	Hungarian E Tehran, IRN	DUP-ARQ: 1400 msgs to HGX 21 Budapest
	HGX ..	Hungarian E Safat, KWT	DUP-ARQ: 1015 msg (5fgs) to HGX 21 Budapest
18042.0	SKR 20	Stockholm Air, S	SSB
		MSF Kinshasa, ZAI	SITOR-A: 0937 msg
18044.0	CLP 8	Cuban E Conakry, GUI	ITA2 50 Bd: 1432 msgs to CLP 1 Habana
18050.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 0918 msgs, 1004 + 1019 tfc, 1238 msg (Polish nx)
18051.0	CLP 1	MFA Habana, CUB	ITA2 50 Bd: 1600 msgs to CLP .. Managua
18052.0 - 18068.0		FIXED + Space Research	
18053.7		UNID Egypt. dipl. st. (596)	SITOR-A: 0730 ATU-A msg

18055.0	'DFZG'	MFA Belgrade, SRB	ITA2 75 Bd: 1403-1539 ry or msgs (E or Serbian nx) or encrypted msg after "FKFKFK..." or "XYXYXY..."
18059.0	'DJBT'	French E Jibuti, DJI	ARQ6-90 200 Bd: 1336-1450 msgs (5lgs) to 'P6Z' Paris [DJBX]
18060.0	*AXI 36*	*Darwin Meteo, NT, AUS*	*FAX // 2628.0 kHz $*
	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 1335 msgs, 1350 tfc, 1402+1450 msgs to Ottawa
18064.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 0543-1232 tfc or msgs
18066.5	HBC 88	ICRC Geneva, SUI	PACTOR: 1530 tfc to Luanda
		ICRC Luanda, AGL	PACTOR: 1530 msgs to HBC 88 Geneva
		Indonesian E Ankara, TUR	SITOR-A: 1240+1335 msgs to Jakarta

18068.0 - 18168.0 AMATEUR + AMATEUR-SATELLITE <510 538>

18074.5		Indonesian E Lagos, NIG	SITOR-A: 0823 msg to Jakarta, 1530 tfc to Jakarta
18100.4		MFA Pyongyang, KRE	ITA2 50 Bd: 0810-1218 msgs or msgs (5lgs)
18123.0		Italian E Tel Aviv, ISR	ARQ-E 96 Bd: 0803 msg (5lgs) to Rome
18156.7		MFA Cairo, EGY	SITOR-A: 0807-1349 ATU-A msg or msgs to various embassies or msg (5lgs)

18168.0 - 18780.0 FIXED + Mobile except aeronautical mobile

18169.0		UNID teleprinter	ITA2 75 encrypted
18173.5	STK	Khartoum Air, SDN	ITA2 50 Bd: 0545-2245 ry or "ch" or msgs [SLA]
18174.0	SNN 299	MFA Warsaw, POL	POL-ARQ 100 Bd: 0827 msgs to Bangkok, 0945 msg (Polish nx) + tfc
18180.7	7RP 20	Algerian E Paris, F	Coquelet 8: 0907 msg to 7RQ 20 El Djaza'ir
18187.5	SAM	MFA Stockholm, S	SWED-ARQ: 0650-1142 tfc or msg (5lgs) to SAM 58 Jakarta or SAM 59 Hanoi
	SAM 58	Swedish E Jakarta, INS	SWED-ARQ: 0650 msg (5lgs) to SAM Stockholm
	SAM 59	Swedish E Hanoi, VTN	SWED-ARQ: 1010 msg (5lgs) + tfc to SAM Stockholm
18202.0		Polish E Pretoria, AFS	POL-ARQ 100 Bd: 1244 msgs (5lgs, 5fgs) + tfc to SNN 299 Warsaw
18203.0	'P6Z'	MFA Paris, F	ARQ6-90 200 Bd: 0920 msg to 'BRZV' Brazzaville, 0955 msg + msg (5lgs) to N'djamena [XNDJ], 1540 msg to 'BRZV'
18210.0	GKX	Portishead Air, G	SSB
18220.0	*JMH 5*	*Tokyo Meteo, J*	*FAX // 3622.5 kHz $*

18220.9	CNM 76X9	MAP Rabat, MRC	ITA2 50 Bd: 1000-1130 F nx, 1200-1400 E nx, 1530-1700 F nx
18230.0	GFL 25	Bracknell Meteo, G	ITA2 75 Bd: 0605-1815 ry or wx
18237.0	*BAF 33*	*Beijing Meteo, CHN*	*FAX // 5527.0 kHz $*
18238.0	*ZRO 4*	*Pretoria Meteo, AFS*	*FAX // 4014.0 kHz $*
18242.0	ZRO 4	Pretoria Meteo, AFS	ITA2 75 Bd: 0432-2031 wx
18250.0		UNID (SOUD?) station (896)	ITA2 75 Bd: 0937 msg (5lgs); 1007 msg (5lgs) + tfc + ry
18251.7		Egyptian E San'a, YEM	SITOR-A: 0800 ATU-A msg + msg (5lgs) to Cairo
18254.0	SUU	Cairo Meteo, EGY	ITA2 100 Bd: 0631-1729 wx
18261.0	*GFE 24*	*Bracknell Meteo, G*	*FAX // 2618.5 kHz $*
18264.0	XVN 48	VNA Hanoi, VTN	ITA2 50 Bd: 0515-0645 F nx, 0645-0830 E nx
18265.0	CNM 78	MAP Rabat, MRC	ITA2 50 Bd: 1000-1130 F nx, 1200-1400 E nx, 1530-1700 F nx
18270.5	HBD 20	MFA Berne, SUI	SITOR-A: 0619-1932 tfc or msg (5lgs) or msg (F/G nx) or tfc to HBD 41 Pretoria
	HBD 41	Swiss E Pretoria, AFS	SITOR-A: 1810 msg (5lgs) to HBD 20 Berne
18275.0	'6XM8'	BNDVB Bonn, D	ARQ-E 288 Bd: 0955 encrypted tfc to 'C37A' MOSSAD Tel Aviv
18276.5	HBD 20	MFA Berne, SUI	SITOR-A: 0935 msg (F/G nx), 1234 msg (G nx)
18279.5	HBD 20	MFA Berne, SUI	SITOR-A: 1227 final tfc to HBD 61 Cairo, s. off
	HBD 61	Swiss E Cairo, EGY	SITOR-A: 1227 final tfc to HBD 20 Berne, s. off
18284.6	HBD 20	MFA Berne, SUI	SITOR-A: 0230 tfc to HBD 22 Delhi, 0714 msg (5lgs), 0900 + 1405 tfc to HBD 30 Lagos
	HBD 22	Swiss E Delhi, IND	SITOR-A: 0230 msg to HBD 20 Berne
	HBD 30	Swiss E Lagos, NIG	SITOR-A: 0900 + 1405 msg (5lgs) to HBD 20 Berne
18289.5	DMK	MFA Bonn, D	ALIS: 0842 tfc, 1250 encrypted msgs after "VVV..." to Riyadh, 1300 + 1340 + 1620 msgs to various embassies
		German E Riyadh, ARS	ALIS: 1250 tfc to DMK Bonn
18291.5	DMK	MFA Bonn, D	ALIS: 1320 tfc to Dakar
		German E Dakar, SEN	ALIS: 1320 final tfc "das war die letzte abfrage fuer heute" to DMK Bonn
18293.7	'RFFA'	MOD Paris, F	ARQ-E3 200 Bd: 1406 msg (5lgs) after "BBBB" to 'RFFVAT' Incirlik [FDX]
18300.0	OLZ	MFA Prague, CZE	ITA2 100 Bd: 0800 + 1026 msgs, 1145 msg (Czech nx)
18301.0	T3T	PTT Bairiki, Tar. At., KIR	SSB
18315.0	VHC	RAN Canberra, ACT, AUS	Piccolo 6: 0736 operational msg to GFH Kai Tak
18316.7		Egyptian E El Djaza'ir, ALG	SITOR-A: 1220 msg (5lgs) to Cairo
18318.0	OMS	MFA Bratislava, SVK	ITA2 100 Bd: 0920 msg (Slovak nx) or msg to Moscow, 1028 + 1155 msgs

18320.0	OLZ	MFA Prague, CZE	ITA2 100 Bd: 0812-1405 msg or msg (Czech nx)
18332.0		UNID SOUD station (396)	ITA2 75 Bd: 0750+1200 msg (5lgs)
18345.0	DMK	MFA Bonn, D	ARQ-E 192 Bd: 0945-1411 tfc or msg or encrypted msg + operational tfc "drahtbericht-eingangskontrolle" to Riyadh
			FEC-A 192 Bd: 1230 encrypted tfc
18346.9		DOSC Moscow, RUS	CIS 10-11-11 MFSK: 1030 msg (5lgs)
18348.0		UNID teleprinter	CIS 10-11-11 MFSK
18352.0		Romanian E Rabat, MRC	RUM-FEC 218 Bd: 0745 encrypted msg to Bucharest, 0820 msg to Bucharest
18365.0		UNID teleprinter	100
18380.2	'RFFA'	MOD Paris, F	ARQ-E3 100 Bd: 0547-1855 "controle de voie" or tfc or msgs to 'RFVI' Le Port [IRE]
18388.6	5AF	Tripoli Air, LBY	ITA2 50 Bd: 0630-2314 ry or msgs [LSA]
18391.5		MFA Jakarta, INS	SITOR-A: 0313-0956 tfc or msg (E nx)
18411.5		Indonesian E Bratislava, SVK	SI-FEC 96 Bd: 0945 msg to Jakarta
		Indonesian E Pyongyang, KRE	SI-FEC 96 Bd: 1231 msg + tfc to Jakarta
18411.7		MFA Jakarta, INS	SI-ARQ 96 Bd: 5 characters: 0711+1319 msgs to European embassies
			SI-FEC 96 Bd: 0320-0920 msgs or msg (5lgs) or msg (E nx)
18420.0	'7A1'	Czech E Baghdad, IRQ	ITA2 100 Bd: 0740+1142 msgs to OLZ Prague
18422.0	CLP 22	Cuban E Hanoi, VTN	ITA2 75 Bd: 1332+1405+1711 msgs (5fgs) to CLP 1 Habana
			CW
18441.2	*JMJ 5*	*Tokyo Meteo, J*	*FAX // 3365.0 kHz $*
18445.0		MFA Oslo, NOR	TWINPLEX YYBB YBYB: SITOR-A: 0629-1012 tfc
18448.0	CLP 1	MFA Habana, CUB	ITA2 50 Bd: 1637+2000 msg
18451.5		Indonesian E Lagos, NIG	SITOR-A: 0835 msg + tfc to Jakarta
18461.5	PCW 1	MFA Den Haag, NLD	SITOR-A: 24 h tfc
			CW
18486.0	*NRK*	*USN Keflavik, ISL*	*FAX // 3357.0 kHz $*
18487.8		MFA Oslo, NOR	TWINPLEX YYBB YBYB: SITOR-A: 0724-1418 msg or msg (N nx)
18493.5		UNID teleprinter	100
18496.1	CNM 80X11	MAP Rabat, MRC	ITA2 50 Bd: 0900-1030 A nx, 1200-1400 E nx, 1530-1700 A nx
18508.8		MFA Jakarta, INS	ITA2 50 Bd: 1120+1313 msg (Indonesian/E nx)
			SI-FEC 96 Bd: 0420 msg (E nx), 0840 msg
18511.5		Indonesian E Caracas, VEN	ITA2 50 Bd: 1250 msgs to Jakarta, s. off

18527.0	'NDJA'	French E N'djamena, TCD	ARQ6-90 200 Bd: 1536 msgs (5lgs) to 'P6Z' Paris
18529.5		Algerian E Amman, JOR	Coquelet 8: 1335-1636 F or ATU-A tfc or msg to 7RQ 20 El Djaza'ir
		Algerian E Baghdad, IRQ	Coquelet 8: 0847 ATU-A msgs to 7RQ 20 El Djaza'ir
		Algerian E Damascus, SYR	Coquelet 8: 1324 msgs to 7RQ 20 El Djaza'ir
		Algerian E Hanoi, VTN	Coquelet 8: 0832 msgs to 7RQ 20 El Djaza'ir
		Algerian E Khartoum, SDN	Coquelet 8: 1558 ATU-A msgs, tfc to 7RQ 20 El Djaza'ir
18552.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1040 msgs (Romanian nx) CW
18553.7	'RFTJ'	FF Dakar, SEN	ARQ-E3 192 Bd: 1012-0140 "controle de voie" or tfc to 'RFFA' Paris [TJI]
18557.5	'C37A'	MOSSAD Tel Aviv, ISR	ARQ-E 288 Bd: 0920+1024 encrypted tfc to '6XM8' BNDVB Bonn
18560.0	*BMF*	*T'ai-pei Meteo, TAI*	*FAX // 4616.0 kHz $*
18621.5	*LRO 84*	*Buenos Aires Meteo, ARG*	*FAX // 10720.0 kHz $*
18629.0	'2B6'	Czech E Addis Ababa, ETH	ITA2 100 Bd: 1200 msgs + final tfc to OLZ Prague CW
18646.6	PCW 1	MFA Den Haag, NLD	SITOR-A: 0452-2127 tfc to PCW 8 Tripoli; QSX 18746.7 kHz CW
18648.5	SOT 265B	PAP Warsaw, POL	SITOR-B: 1200+1400+1800 Polish nx
18680.0	*RCH 72*	*Tashkent Meteo, UZB*	*(hx 9340.0 kHz)*
18688.0	SAM	MFA Stockholm, S	SWED-ARQ: 0900-1312 tfc to SAM 31 El Djaza'ir or SAM 61 Delhi or SAM 70 Addis Ababa
	SAM 31	Swedish E El Djaza'ir, ALG	SWED-ARQ: 1030+1045 msg to SAM Stockholm
	SAM 61	Swedish E Delhi, IND	SWED-ARQ: 0900 msg to SAM Stockholm
	SAM 70	Swedish E Addis Ababa, ETH	SWED-ARQ: 1117 msg (5lgs) after "SSSLLLSSSLLLSSSLLL" to SAM Stockholm, 1303 tfc to SAM
	SAM 71	Swedish E Dar es Salaam, TZA	SWED-ARQ: 0740 tfc to SAM Stockholm
18704.2	DGS 70H5	PIAB Bonn, D	FEC-A 96 Bd: 0830-1030 G nx
18721.7		MFA Cairo, EGY	SITOR-A: 1130 msg (ATU-A nx), 1237+1330 tfc SITOR-B: 0718 tfc
18725.0		Indian E Yangon, MYA	ITA2 50 Bd: 0830 clg + tfc to 8WD Delhi
18751.7		Egyptian E Rabat, MRC	SITOR-A: 0917 ATU-A msg to Cairo, 1308 ATU-A tfc to Cairo
18756.0	HSQ	INTERPOL Bangkok, THA	SITOR-A: 0315-0540+1132 tfc or msg to JPA 24 Tokyo
	JPA 24	INTERPOL Tokyo, J	SITOR-A: 0315-0540+1132 tfc or msgs to HSQ Bangkok
18757.3	7RQ 20	MFA El Djaza'ir, ALG	Coquelet 8: 0620 msgs to Islamabad, 1313 msg (F press review)

18757.9	**SAM**	**MFA Stockholm, S**	**SWED-ARQ: 1008 msg (Swedish nx)**
18760.0	**'P6Z'**	**MFA Paris, F**	**FEC-A 192 Bd: 1000 msgs to 'J5W' Rabat, 1524 tfc, 1810+1819 msg (5lgs)**
18762.0		**MFA Bucharest, ROU**	**RUM-FEC 164 Bd: 1003-1807 msgs or final tfc "qrx tmw tnx 73/88 gb ar sk"**
18774.2	**CLP 1**	**MFA Habana, CUB**	**ITA2 50 Bd: 1422 msg (5lgs) to CLP 8 Conakry**

18780.0 - 18900.0 MARITIME MOBILE

18780.0		ship stations, ch 1801	SSB QSX 19755.0 kHz
18783.0		ship stations, ch 1802	SSB QSX 19758.0 kHz
18786.0		ship stations, ch 1803	SSB QSX 19761.0 kHz
18789.0		ship stations, ch 1804	SSB QSX 19764.0 kHz
18792.0		ship stations, ch 1805	SSB QSX 19767.0 kHz
18795.0		ship stations, ch 1806 (WORLDWIDE CALLING FREQ.)	SSB QSX 19770.0 kHz
18798.0		ship stations, ch 1807	SSB QSX 19773.0 kHz
18801.0		ship stations, ch 1808	SSB QSX 19776.0 kHz
18801.5		**MFA Jakarta, INS**	**ITA2 50 Bd: 1046 msgs; 1350 msgs to Kabul**
18804.0		ship stations, ch 1809	SSB QSX 19779.0 kHz
18807.0		ship stations, ch 1810	SSB QSX 19782.0 kHz
18810.0		ship stations, ch 1811	SSB QSX 19785.0 kHz
18813.0		ship stations, ch 1812	SSB QSX 19788.0 kHz
18816.0		ship stations, ch 1813	SSB QSX 19791.0 kHz
18819.0		ship stations, ch 1814	SSB QSX 19794.0 kHz
18822.0		ship stations, ch 1815	SSB QSX 19797.0 kHz
18825.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB
18828.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB
18831.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB
18834.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB
18837.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB
18840.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB
18843.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB
18870.5		ship stations, channel 1	QSX 19681.0 kHz
18871.0		ship stations, channel 2	QSX 19681.5 kHz
18871.5		ship stations, channel 3	QSX 19682.0 kHz
18872.0		ship stations, channel 4	QSX 19682.5 kHz
18872.5		ship stations, channel 5	QSX 19683.0 kHz
18873.0		ship stations, channel 6	QSX 19683.5 kHz
18873.5		ship stations, channel 7	QSX 19684.0 kHz
18874.0		ship stations, channel 8	QSX 19684.5 kHz
18874.5		ship stations, channel 9	QSX 19685.0 kHz
18875.0		ship stations, channel 10	QSX 19685.5 kHz
18875.5		ship stations, channel 11	QSX 19686.0 kHz
18876.0		ship stations, channel 12	QSX 19686.5 kHz
18876.5		ship stations, channel 13	QSX 19687.0 kHz
18877.0		ship stations, channel 14	QSX 19687.5 kHz
18877.5		ship stations, channel 15	QSX 19688.0 kHz
18878.0		ship stations, channel 16	QSX 19688.5 kHz
18878.5		ship stations, channel 17	QSX 19689.0 kHz
18879.0		ship stations, channel 18	QSX 19689.5 kHz
18879.5		ship stations, channel 19	QSX 19690.0 kHz
18880.0		ship stations, channel 20	QSX 19690.5 kHz
18880.5		ship stations, channel 21	QSX 19691.0 kHz

18881.0		ship stations, channel 22	QSX 19691.5 kHz
18881.5		ship stations, channel 23	QSX 19692.0 kHz
18882.0		ship stations, channel 24	QSX 19692.5 kHz
18882.5		ship stations, channel 25	QSX 19693.0 kHz
18883.0		ship stations, channel 26	QSX 19693.5 kHz
18883.5		ship stations, channel 27	QSX 19694.0 kHz
18884.0		ship stations, channel 28	QSX 19694.5 kHz
18884.5		ship stations, channel 29	QSX 19695.0 kHz
18885.0		ship stations, channel 30	QSX 19695.5 kHz
		PA IFOR Sarajevo, BIH	SITOR-A: 0658 tfc to Multan
18885.5		ship stations, channel 31	QSX 19696.0 kHz
18886.0		ship stations, channel 32	QSX 19696.5 kHz
18886.5		ship stations, channel 33	QSX 19697.0 kHz
18887.0		ship stations, channel 34	QSX 19697.5 kHz
18887.5		ship stations, channel 35	QSX 19698.0 kHz
18888.0		ship stations, channel 36	QSX 19698.5 kHz
18888.5		ship stations, channel 37	QSX 19699.0 kHz
18889.0		ship stations, channel 38	QSX 19699.5 kHz
18889.5		ship stations, channel 39	QSX 19700.0 kHz
18890.0		ship stations, channel 40	QSX 19700.5 kHz
18890.5		ship stations, channel 41	QSX 19701.0 kHz
18891.0		ship stations, channel 42	QSX 19701.5 kHz
18891.5		ship stations, channel 43	QSX 19702.0 kHz
18892.0		ship stations, channel 44	QSX 19702.5 kHz
18892.5		ship stations, channel 45	QSX 19703.0 kHz
18893.0		ship stations, channel 1	non-paired
18893.5		ship stations, channel 2	non-paired
18894.0		ship stations, channel 3	non-paired
18894.5		ship stations, channel 4	non-paired
18895.0		ship stations, channel 5	non-paired
		PSF Goma, ZAI	G-TOR: 1030 tfc + msgs to Paris
		PSF Paris, F	G-TOR: 1030 tfc to Goma
18895.5		ship stations, channel 6	non-paired
18896.0		ship stations, channel 7	non-paired
18896.5		ship stations, channel 8	non-paired
18897.0		ship stations, channel 9	non-paired
18897.5		ship stations, channel 10	non-paired
18898.0		ship stations, channel 11	non-paired
18898.5	WORLDWIDE	SHIP STATIONS DSC FREQUENCY	QSX 19703.5 kHz
18899.0	WORLDWIDE	SHIP STATIONS DSC FREQUENCY	
18899.5	WORLDWIDE	SHIP STATIONS DSC FREQUENCY	

18900.0 - 19020.0 BROADCASTING FIXED <SSB only, as from 01 April 2007>

18902.5	MKD	RAF Akrotiri, CYP	Piccolo 6: 1155 operational msg
18931.5		Indonesian E Cairo, EGY	SI-ARQ 96 Bd: 5 characters: 1250 msg to Jakarta
18940.0	*BDF*	*Shanghai Meteo, CHN*	*FAX // 5100.0 kHz*
18944.5		Algerian E Accra, GHA	Coquelet 8: 1430 msgs to 7RQ 20 El Djaza'ir
		Algerian E Dar es Salaam, TZA	Coquelet 8: 1400 msg (5fgs) to 7RQ 20 El Djaza'ir
		Algerian E Kampala, UGA	Coquelet 8: 0921 msgs to 7RQ 20 El Djaza'ir
		Algerian E Libreville, GAB	Coquelet 8: 1024 msgs to 7RQ 20 El Djaza'ir
18966.7	'RFHJ'	FF Papeete, Tahiti, OCE	ARQ-E3 96 Bd: 0000-2144 "controle de voie" or msg

18972.0	'DFZG'	MFA Belgrade, SRB	ITA2 75 Bd: 0554-1555 ry or msg or msg (E or Serbian nx)
18982.0	7CB	IN Belawan, INS	CW
18993.5	SPW	Warsaw R, POL	SITOR-A: 0440-1940 tts SITOR-B: 0700+0900+1100+1300+1500 tfc list CW
18995.0	SPW	Warsaw R, POL	SSB
19020.0 - 19680.0		FIXED	
19027.0	PWX	BN Brasilia, B	ITA2 75 Bd: 1325 ry, 1600 msg, 1854 clg HDN Quito, 1920 ry, 1928+1946 clg CXR Montevideo
19027.5	PWZ	BN Rio de Janeiro, B	ITA2 75 Bd: 1215 ry, msg
19031.5	7RQ 50	Algerian E Jakarta, INS	Coquelet 8: 1230 msg to 7RQ 20 El Djaza'ir
19031.7		MFA Islamabad, PAK	SITOR-A: 0759+1013 tfc, 1050 msg to El Djaza'ir, 1245 tfc
		Pakistan E El Djaza'ir, ALG	SITOR-A: 1050 msgs to Islamabad
19032.0	7RV 20	Algerian E Moscow, RUS	Coquelet 8: 1210 msg to 7RQ 20 El Djaza'ir
19036.7		Egyptian E Harare, ZWE	SITOR-A: 1200 ATU-A tfc to Cairo
19046.7		Egyptian E Delhi, IND	SITOR-A: 0350 ATU-A msg to Cairo
19048.7	'RFFA'	MOD Paris, F	ARQ-E3 192 Bd: 1022-1916 "controle de voie" or tfc to 'RFTJ' Dakar [ISG]
19057.0		Indonesian E Delhi, IND	SITOR-A: 0558 msgs to Jakarta
19089.0	CLP 25	Cuban E Maputo, MOZ	ITA2 100 Bd: 1720 msgs + tfc to CLP 1 Habana
19091.7		MFA Islamabad, PAK	SITOR-A: 0700 tfc to Dhaka
19101.7	'RFLI'	FF Fort de France, MRT	ARQ-E3 192 Bd: 0606-2356 msgs + encrypted msgs after "KKKK..." + "controle de voie" to 'RFFA' Paris [ALI, BFL, BSL, FDI]
19106.5		MFA Jakarta, INS	SITOR-A: 0949-1114 msg or msg (E or Indonesian nx)
19107.0	OZU 25	MFA Copenhagen, DNK	SSB
19109.0	OZU 25	MFA Copenhagen, DNK	TWINPLEX YYBB YBYB: SITOR-A: 1033+ +1056+1404+1426 tfc
19117.5		MFA Jakarta, INS	SITOR-A: 0334-1548 tfc or msg (E nx) or msgs to Delhi
19141.2	7RY 50	Algerian E Dakar, SEN	Coquelet 8: 1335 msg to 7RQ 20 El Djaza'ir
		Algerian E Lagos, NIG	Coquelet 8: 1350 msg to 7RQ 20 El Djaza'ir
		Algerian E Nouakchott, MTN	Coquelet 8: 1445 msgs to 7RQ 20 El Djaza'ir
19160.0	'DOR'	MFA Sofia, BUL	ITA2 150 Bd: 0831 msg (Bulgarian nx), 0837 ry, 0945 msg (Bulgarian nx)
19216.5	T3L	PTT Kiritimati, KIR	SSB
19216.7	'RFLI'	FF Fort de France, MRT	ARQ-E3 96 Bd: 0825-1916 "controle de voie" or tfc to 'RFHJ' Papeete [LIH]

19217.9	SAM	MFA Stockholm, S	SWED-ARQ: 0830 msg to SAM 76 Pretoria, 0909 msg to SAM 71 Dar es Salaam
	SAM 71	Swedish E Dar es Salaam, TZA	SWED-ARQ: 1058 tfc to SAM Stockholm
	SAM 76	Swedish E Pretoria, AFS	SWED-ARQ: 0830 tfc to SAM Stockholm
19226.0	DMK	MFA Bonn, D	ALIS: 1253+1326 tfc
19266.7		Egyptian E Ankara, TUR	SITOR-A: 0613 msg (5lgs) + ATU-A tfc to Cairo, 0937+1023 tfc to Cairo
19309.5	'HCMOZMA'	UNO Maputo, MOZ	PACTOR: 1252 msg to 'HCSWIGE' Geneva
	'HCSWIGE'	UNO Geneva, SUI	PACTOR: 1020 tfc, 1252 tfc to 'HCMOZMA' Maputo
		UNO Kigali, RRW	PACTOR: 1551 msg
19320.0	OLZ	MFA Prague, CZE	ITA2 100 Bd: 1250 msg (Czech nx)
19350.0		UNID teleprinter	75
19357.0		MFA Lagos, NIG	FEC-A 96 Bd: 1037-1757 tfc or msgs to Addis Ababa or Gaborone or Kinshasa
		Nigerian E Kinshasa, ZAI	FEC-A 96 Bd: 1350 msgs (5lgs) + tfc to Lagos
		Nigerian E London, G	FEC-A 96 Bd: 1255 msg to Lagos
19359.0		USAF AWS Ceiba, PTR	ITA2 75 Bd: 1617-2103 wx
19360.0	'DOR'	MFA Sofia, BUL	ITA2 75 Bd: 1024 msg (Bulgarian nx)
19363.0		*USAF AWS Ceiba, PTR*	*FAX // 3232.0 kHz*
19379.0		VoA Greenvl. fdr., NC, USA	SSB
19400.0	VVD 69	Delhi Meteo, IND	ITA2 50 Bd: 0040-1408 wx
19402.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 0955 msgs. 1025 tfc
19412.0		UNID (SOUD?) station (896)	ITA2 75 Bd: 1020 msg (5lgs), final tfc, s. off
19418.7	'RFFA'	MOD Paris, F	ARQ-E3 192 Bd: 0605-1917 tfc or msgs or msg (5lgs) after "BBBB" [IGU]
19463.0		SUNA Khartoum, SDN	ITA2 50 Bd: 0915+1615 F nx, 1700 E nx
19495.0		MFA Bucharest, ROU	RUM-FEC 218 Bd: 0752+0915 encrypted tfc
19510.0	GKX	Portishead Air, G	SSB
19532.0	FJY 2	DTRE Port-aux-Francais, KER	ARQ-E3 96 Bd: 0820+1026+1230 msgs to 'RFGW' Paris
19567.7		MFA Cairo, EGY	SITOR-A: 0920-1535 tfc or ATU-A msgs
19608.0		Polish E Nairobi, KEN	POL-ARQ 100 Bd: 1310 msgs to SNN 299 Warsaw
19622.0	OZU 25	MFA Copenhagen, DNK	TWINPLEX YYBB YBYB: SITOR-A: 1000-1423 tfc or msg (Danish nx)
19650.0	'G7M'	French E Bangkok, THA	FEC-A 144 Bd: 0750+0940 msg (5lgs) to 'P6Z' Paris

19680.0 - 19800.0 MARITIME MOBILE <520B>

19680.0	*3MA 23*	*CNA T'ai-pei, TAI*	*FAX // 9430.0 kHz* CW

19680.5	WORLDWIDE	NBDPT MSI FREQUENCY	
19681.0		coast stations, channel 1	QSX 18870.5 kHz
19681.5		coast stations, channel 2	QSX 18871.0 kHz
19682.0		coast stations, channel 3	QSX 18871.5 kHz
19682.5		coast stations, channel 4	QSX 18872.0 kHz
	LSD 836	*Buenos Aires R, ARG*	*scheduled*
19683.0		coast stations, channel 5	QSX 18872.5 kHz
	LZW 76	*Varna R, BUL*	*scheduled*
19683.5		coast stations, channel 6	QSX 18873.0 kHz
	SAB 506	*Goeteborg R, S*	*scheduled*
19684.0		coast stations, channel 7	QSX 18873.5 kHz
19684.5		coast stations, channel 8	QSX 18874.0 kHz
19685.0		coast stations, channel 9	QSX 18874.5 kHz
19685.5		coast stations, channel 10	QSX 18875.0 kHz
	WLO	Mobile R, AL, USA	SITOR-A: 1449 + 1740 + 1920 tts CW
19686.0		coast stations, channel 11	QSX 18875.5 kHz
19686.5		coast stations, channel 12	QSX 18876.0 kHz
	WNU	*Slidell R, LA, USA*	*scheduled*
19687.0		coast stations, channel 13	QSX 18876.5 kHz
19687.5		coast stations, channel 14	QSX 18877.0 kHz
	KFS	*San Francisco R, CA, USA*	*scheduled*
	LSD 836	*Buenos Aires R, ARG*	*scheduled*
19688.0		coast stations, channel 15	QSX 18877.5 kHz
19688.5		coast stations, channel 16	QSX 18878.0 kHz
	VCT	*Tors Cove R, NFLD, CAN*	*scheduled*
19689.0		coast stations, channel 17	QSX 18878.5 kHz
19689.5		coast stations, channel 18	QSX 18879.0 kHz
	LSD 836	*Buenos Aires R, ARG*	*scheduled*
	LZW 77	*Varna R, BUL*	*scheduled*
19690.0		coast stations, channel 19	QSX 18879.5 kHz
19690.5		coast stations, channel 20	QSX 18880.0 kHz
19691.0		coast stations, channel 21	QSX 18880.5 kHz
	KEJ	Hoolehua R, HWA	SITOR-B: H + 15 tfc list
19691.5		coast stations, channel 22	QSX 18881.0 kHz
	SAB 522	*Goeteborg R, S*	*scheduled*
19692.0		coast stations, channel 23	QSX 18881.5 kHz
19692.5		coast stations, channel 24	QSX 18882.0 kHz
19693.0		coast stations, channel 25	QSX 18882.5 kHz
	UGC	Saint Petersburg R, RUS	SITOR-A: 0822 + 1105 R tts wtsca CW
19693.5		coast stations, channel 26	QSX 18883.0 kHz
	UFN	*Novorossiysk R, RUS*	*scheduled*
19694.0		coast stations, channel 27	QSX 18883.5 kHz
19694.5		coast stations, channel 28	QSX 18884.0 kHz
	VCT	*Tors Cove R, NFLD, CAN*	*scheduled*
19695.0		coast stations, channel 29	QSX 18884.5 kHz
19695.5		coast stations, channel 30	QSX 18885.0 kHz
19696.0		coast stations, channel 31	QSX 18885.5 kHz
19696.5		coast stations, channel 32	QSX 18886.0 kHz
19697.0		coast stations, channel 33	QSX 18886.5 kHz
19697.5		coast stations, channel 34	QSX 18887.0 kHz
	SPB 71	Szczecin R, POL	SITOR-A: 0832 tts SITOR-B: 1200 tfc list CW
19698.0		coast stations, channel 35	QSX 18887.5 kHz
	OST 69	Oostende R, BEL	SITOR-A: 0613-1838 tts CW
19698.5		coast stations, channel 36	QSX 18888.0 kHz

19699.0		coast stations, channel 37	QSX 18888.5 kHz
	LPD	*General Pacheco R, ARG*	*scheduled*
	UFN	Novorossiysk R, RUS	SITOR-A: 0606-1627 R tts wtsca CW
19699.5		coast stations, channel 38	QSX 18889.0 kHz
19700.0		coast stations, channel 39	QSX 18889.5 kHz
	LPD	*General Pacheco R, ARG*	*scheduled*
19700.5		coast stations, channel 40	QSX 18890.0 kHz
19701.0		coast stations, channel 41	QSX 18890.5 kHz
19701.5		coast stations, channel 42	QSX 18891.0 kHz
19702.0		coast stations, channel 43	QSX 18891.5 kHz
19702.5		coast stations, channel 44	QSX 18892.0 kHz
19703.0		coast stations, channel 45	QSX 18892.5 kHz
19703.5	WORLDWIDE	COAST STATIONS DSC FREQUENCY	QSX 18898.5 KHz
19704.0	WORLDWIDE	COAST STATIONS DSC FREQUENCY	
19704.5	WORLDWIDE	COAST STATIONS DSC FREQUENCY	
19714.0	UFC	Nakhodka R, SE, RUS	CW
19724.5	UIW	Kaliningrad R, RUS	ITA2 50 Bd: 0600-1724 R tts wtsca
19731.5	PCW 1	MFA Den Haag, NLD	TWINPLEX BYBY BYYB: SITOR-A: 0840 tfc, 1023 msgs (Dutch nx) + msgs (5lgs)
19734.5	UGC	Saint Petersburg R, RUS	SITOR-A: 0614-1628 R tts wtsca
19738.5	YLQ	Riga R, LVA	CW
19747.5	6VU 79	Dakar Meteo, SEN	ITA2 50 Bd: 0408-2326 ry or wx
19751.5	*6VU 79*	*Dakar Meteo, SEN*	*FAX // 13666.0 kHz $*
19755.0		coast stations, ch 1801	SSB QSX 18780.0 kHz
	EHY	Madrid R, E	
	GKT 18	Portishead R, G	
19758.0		coast stations, ch 1802	SSB QSX 18783.0 kHz
	PCG 91	Scheveningen R, NLD	
	TFA	Reykjavik R, ISL	
19761.0		coast stations, ch 1803	SSB QSX 18786.0 kHz
	CUG	Ponta Delgada R, AZR	
	CUL	Lisbon R, POR	
	GKU 18	Portishead R, G	
	PPO	Olinda R, B	
19764.0		coast stations, ch 1804	SSB QSX 18789.0 kHz
	JNA	JN Tokyo, J	
	WNU	Slidell R, LA, USA	
19767.0		coast stations, ch 1805	SSB QSX 18792.0 kHz
	IAR	Rome R, I	
	JNA	JN Tokyo, J	
	KFS	San Francisco R, CA, USA	
19770.0		coast stations, ch 1806 (WORLDWIDE CALLING FREQ.)	SSB QSX 18795.0 kHz
19773.0		coast stations, ch 1807	SSB QSX 18798.0 kHz
	LSD 836	Buenos Aires R, ARG	
	TFA	Reykjavik R, ISL	
	WLO	Mobile R, AL, USA	
19776.0		coast stations, ch 1808	SSB QSX 18801.0 kHz
	KEJ	Hoolehua R, HWA	
	3AC 18	Monte Carlo R, MCO	
	4XO	Haifa R, ISR	
19779.0		coast stations, ch 1809	SSB QSX 18804.0 kHz
	HEB 19	Berne R, SUI	
	PPJ	Juncao R, B	
	SVN 63	Athens R, GRC	
19782.0		coast stations, ch 1810	SSB QSX 18807.0 kHz
	LPL	General Pacheco R, ARG	

19782.0	LYL	Klaipeda R, LTU	
	LZW 79	Varna R, BUL	
19785.0		coast stations, ch 1811	SSB QSX 18810.0 kHz
	PPO	Olinda R, B	
19788.0		coast stations, ch 1812	SSB QSX 18813.0 kHz
	LPL	General Pacheco R, ARG	
	VCT	Tors Cove R, NFLD, CAN	
	9AR	Rijeka R, HRV	
19791.0		coast stations, ch 1813	SSB QSX 18816.0 kHz
	EHY	Madrid R, E	
	FFL 89	Saint Lys R, F	
19794.0		coast stations, ch 1814	SSB QSX 18819.0 kHz
	EHY	Madrid R, E	
	PPJ	Juncao R, B	
	TFA	Reykjavik R, ISL	
	9AR	Rijeka R, HRV	
19797.0		coast stations, ch 1815	SSB QSX 18822.0 kHz
	LSD 836	Buenos Aires R, ARG	

19800.0 - 19990.0 FIXED

19818.7		Egyptian E Harare, ZWE	SITOR-A: 0750 ATU-A msg to Cairo
19827.0		MFA Oslo, NOR	TWINPLEX YYBB YBYB: SITOR-A: 0843 clg + tfc to Dar es Salaam
		Norwegian E Dar es Salaam, TZA	TWINPLEX YYBB YBYB: SITOR-A: 0843 msgs to Oslo
19850.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1210 msg (Romanian nx)
19853.0		MFA Bucharest, ROU	RUM-FEC 164 Bd: 1005-1237 msgs
19858.0	*NPN*	*USN Apra Harbour, GUM*	*FAX // 10253.0 kHz $*
19860.0	MGJ	RN Faslane, G	ITA2 75 Bd: 0730-1103 channel status
19862.0	*NPN*	*USN Apra Harbour, GUM*	*FAX // 5262.0 kHz $*
19876.0		MFA Rome, I	ARQ-E 96 Bd: 0827 msg (5lgs) to Tehran, 1045 msgs
19892.0		UNID teleprinter	ITA2 75 encrypted
19961.2	COP	Yright Klingenfuss, D	72070 Tübingen Germoney

19990.0 - 19995.0 STANDARD FREQUENCY AND TIME SIGNAL + Space Research <501>

19993.0	WORLDWIDE	MSV SAR OPERATIONS FREQ.	SSB

19995.0 - 20010.0 STANDARD FREQUENCY AND TIME SIGNAL <501>

20000.0	WWV	Fort Collins TS, CO, USA	COMB

20010.0 - 21000.0 FIXED + Mobile

20015.0	*NAM*	*USN Norfolk, VA, USA*	*FAX // 3357.0 kHz $*
20020.0	DMK	MFA Bonn, D	ALIS: 0658+1456 tfc
20036.7		MFA Cairo, EGY	SITOR-A: 1450 tfc
20042.0	CLP 22	Cuban E Hanoi, VTN	ITA2 75 Bd: 0800 msg to CLP 1 Habana

20045.0	HGX 21	MFA Budapest, HNG	DUP-ARQ: 1250 tfc
20062.5	DMK	MFA Bonn, D	ALIS: 1252 tfc
20065.0	GKX	Portishead Air, G	SSB
20092.0	'DJBT'	French E Jibuti, DJI	ARQ6-90 200 Bd: 1343+1356+1400 msgs (5lgs) to 'P6Z' Paris [DJBX]
20095.4	'KHSA'	French E Kinshasa, ZAI	ARQ6-90 200 Bd: 1434+1439+1525 msg (5lgs) to 'P6Z' Paris
20113.0	FJY 2	DTRE Port-aux-Francais, KER	VFT: ARQ-E3 96 Bd: 0815-1259 msgs or wx to 'RFGW' Paris
	FJY 4	DTRE Martin de Vivies, AMS	VFT: ARQ-E3 96 Bd: 0720+0905 msgs to 'RFGW' Paris
20120.0	CLP 67	Cuban E Baghdad, IRQ	ITA2 75 Bd: 0840 msg (S press review) to CLP 1 Habana
20160.0		Sydney Air, NSW, AUS	SSB
20215.0		UNID teleprinter	75
20298.0	NKW	USN Diego Garcia, DGA	COMB
20302.0	*NKW*	*USN Diego Garcia, DGA*	*FAX // 5262.0 kHz $*
20304.7		Egyptian E Kinshasa, ZAI	SITOR-A: 0924+1110+1254+1536 ATU-A tfc to Cairo
20336.5		UNID teleprinter	100
20364.0	'DOR'	MFA Sofia, BUL	ITA2 150 Bd: 0830 msg (5fgs)
20401.5		Indonesian E Lagos, NIG	SITOR-A: 1340+1526+1625+1700 msg to Jakarta
20420.5	DMK	MFA Bonn, D	ALIS: 0837+1215 tfc
20427.0	'NDJA'	French E N'djamena, TCD	ARQ6-90 200 Bd: 0837-1154 msg (5lgs) to 'P6Z' Paris [NDJX]
20447.0	CLP 1	MFA Habana, CUB	ITA2 50 Bd: 1538 msg to Lagos, 1604 msg, 1809 msgs (5fgs) to Delhi CW
20456.5	'C37A'	MOSSAD Tel Aviv, ISR	ARQ-E 192 Bd: 1103+1155+1408+1545 encrypted tfc to '6XM8' BNDVB Bonn ARQ-E 288 Bd: 1058+1220 encrypted tfc to '6XM8' BNDVB Bonn
20469.0	*AXM 37*	*Melbourne Met., VIC, AUS*	*FAX // 2628.0 kHz $*
20475.0	GYU	RN Gibraltar, GIB	ITA2 75 Bd: 1456 ry
20560.0		JANA Tripoli, LBY	ITA2 50 Bd: 1600+1700 E nx
20619.0	OLZ	MFA Prague, CZE	ITA2 100 Bd: 0752-1138 tfc or msg or msg (Czech nx)
20633.7	'RFVI'	FF Le Port, REU	ARQ-E3 100 Bd: 0639-1750 "controle de voie" or msgs to 'RFFA' Paris [REI]
20699.9	SAM	MFA Stockholm, S	SWED-ARQ: 0741-1509 tfc or msgs or encrypted msgs after "KCKC SSSLLLSSSLLLSSSLLL" or msgs (5lgs) to various embassies
20734.0	4UZ	UNO Geneva, SUI	PACTOR: 0730+0925+0943 tfc, 1350 tfc to Asmara, 1435 msgs
		UNO Asmara, ERI	PACTOR: 1350 msg to 4UZ Geneva
20754.4	HBC 88	ICRC Geneva, SUI	PACTOR: 0703-1503 tfc or msgs
20775.0	8AA	IN Jakarta, INS	CW

20813.7	**'RFTJD'**	**FF Libreville, GAB**	**ARQ-E3 192 Bd: 0703-2122 "controle de cle" or "controle de voie" or encrypted msg after "BBBB" or msg (5lgs) to 'RFFA' Paris [FTI]**
20815.0	**HBC 88**	**ICRC Geneva, SUI**	**PACTOR: 0819+1255 tfc**
20870.0	**CLP 22**	**Cuban E Hanoi, VTN**	**ITA2 75 Bd: 1416 msgs + encrypted msgs to CLP 1 Habana**
20950.0		**UNID station (896)**	**ARQ-E 192 Bd: 0801-1539 encrypted tfc**
20959.9	**SAM**	**MFA Stockholm, S**	**SWED-ARQ: 0653-1340 tfc or msg or msg (5lgs) to various embassies**
20978.5	**CLP 45**	**Cuban E Luanda, AGL**	**ITA2 50 Bd: 1610 msg**

21000.0 - 21450.0 AMATEUR + AMATEUR-SATELLITE <510>

21182.0		**Portuguese E Kinshasa, ZAI**	**SITOR-A: 1046-1937 tfc + msgs to Lisbon**
21284.0	**RDL**	**Smolensk, RUS**	**CW**

21450.0 - 21850.0 BROADCASTING

21785.0	*NPM*	*USN Pearl Harbour, HWA*	*FAX // 4855.0 kHz $*
21818.5	**'C37A'**	**MOSSAD Tel Aviv, ISR**	**ITA2 50 Bd: 0946 clg '6XM8' BNDVB Bonn**

21850.0 - 21870.0 FIXED <539>

21870.0 - 21924.0 AERONAUTICAL FIXED

21924.0 - 22000.0 AERONAUTICAL MOBILE (R)

21940.0	AMS = W I	SSB
21943.0	AMS = W V	SSB
21946.0	AMS = W I	SSB
21949.0	AMS = W III	SSB
21952.0	AMS = W I	SSB
21955.0	AMS = W IV	SSB
21958.0	AMS = W I	SSB
21961.0	AMS = W V	SSB
21964.0	AMS = W II	SSB
21967.0	AMS = W I	SSB
21970.0	AMS = W III	SSB
21973.0	AMS = W I	SSB
21976.0	AMS = W IV	SSB
21979.0	AMS = W I	SSB
21982.0	AMS = W V	SSB
21985.0	AMS = W II	SSB
21988.0	AMS = W I	SSB
21991.0	AMS = W IV	SSB
21994.0	AMS = W V	SSB
21997.0	AMS = W I	SSB

22000.0 - 22855.0 MARITIME MOBILE <520B 540>

22000.0		ship stations, ch 2201	SSB	QSX 22696.0 kHz
22003.0		ship stations, ch 2202	SSB	QSX 22699.0 kHz
22006.0		ship stations, ch 2203	SSB	QSX 22702.0 kHz
22009.0		ship stations, ch 2204	SSB	QSX 22705.0 kHz
22012.0		ship stations, ch 2205	SSB	QSX 22708.0 kHz
22015.0		ship stations, ch 2206	SSB	QSX 22711.0 kHz
22018.0		ship stations, ch 2207	SSB	QSX 22714.0 kHz
22021.0		ship stations, ch 2208	SSB	QSX 22717.0 kHz
22024.0		ship stations, ch 2209	SSB	QSX 22720.0 kHz
22027.0		ship stations, ch 2210	SSB	QSX 22723.0 kHz
22030.0		ship stations, ch 2211	SSB	QSX 22726.0 kHz
22033.0		ship stations, ch 2212	SSB	QSX 22729.0 kHz
22036.0		ship stations, ch 2213	SSB	QSX 22732.0 kHz
22039.0		ship stations, ch 2214	SSB	QSX 22735.0 kHz
22042.0		ship stations, ch 2215	SSB	QSX 22738.0 kHz
22045.0		ship stations, ch 2216	SSB	QSX 22741.0 kHz
22048.0		ship stations, ch 2217	SSB	QSX 22744.0 kHz
22051.0		ship stations, ch 2218	SSB	QSX 22747.0 kHz
22054.0		ship stations, ch 2219	SSB	QSX 22750.0 kHz
22057.0		ship stations, ch 2220	SSB	QSX 22753.0 kHz
22060.0		ship stations, ch 2221 (WORLDWIDE CALLING FREQ.)	SSB	QSX 22756.0 kHz
22063.0		ship stations, ch 2222	SSB	QSX 22759.0 kHz
22066.0		ship stations, ch 2223	SSB	QSX 22762.0 kHz
22069.0		ship stations, ch 2224	SSB	QSX 22765.0 kHz
22072.0		ship stations, ch 2225	SSB	QSX 22768.0 kHz
22075.0		ship stations, ch 2226	SSB	QSX 22771.0 kHz
22078.0		ship stations, ch 2227	SSB	QSX 22774.0 kHz
22081.0		ship stations, ch 2228	SSB	QSX 22777.0 kHz
22084.0		ship stations, ch 2229	SSB	QSX 22780.0 kHz
22087.0		ship stations, ch 2230	SSB	QSX 22783.0 kHz
22090.0		ship stations, ch 2231	SSB	QSX 22786.0 kHz
22093.0		ship stations, ch 2232	SSB	QSX 22789.0 kHz
22096.0		ship stations, ch 2233	SSB	QSX 22792.0 kHz
22099.0		ship stations, ch 2234	SSB	QSX 22795.0 kHz
22102.0		ship stations, ch 2235	SSB	QSX 22798.0 kHz
22105.0		ship stations, ch 2236	SSB	QSX 22801.0 kHz
22108.0		ship stations, ch 2237	SSB	QSX 22804.0 kHz
22111.0		ship stations, ch 2238	SSB	QSX 22807.0 kHz
22114.0		ship stations, ch 2239	SSB	QSX 22810.0 kHz
22117.0		ship stations, ch 2240	SSB	QSX 22813.0 kHz
22120.0		ship stations, ch 2241	SSB	QSX 22816.0 kHz
22123.0		ship stations, ch 2242	SSB	QSX 22819.0 kHz
22126.0		ship stations, ch 2243	SSB	QSX 22822.0 kHz
22129.0		ship stations, ch 2244	SSB	QSX 22825.0 kHz
22132.0		ship stations, ch 2245	SSB	QSX 22828.0 kHz
22135.0		ship stations, ch 2246	SSB	QSX 22831.0 kHz
22138.0		ship stations, ch 2247	SSB	QSX 22834.0 kHz
22141.0		ship stations, ch 2248	SSB	QSX 22837.0 kHz
22144.0		ship stations, ch 2249	SSB	QSX 22840.0 kHz
22147.0		ship stations, ch 2250	SSB	QSX 22843.0 kHz
22150.0		ship stations, ch 2251	SSB	QSX 22846.0 kHz
22153.0		ship stations, ch 2252	SSB	QSX 22849.0 kHz
22156.0		ship stations, ch 2253	SSB	QSX 22852.0 kHz
22159.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB	
22162.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB	
22165.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB	
22168.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB	

22171.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB	
22174.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB	
22177.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB	
22242.0 -		ship stations	CW	
- 22279.0		working frequencies		
22279.5		ship stations calling, ch 1	CW	group I
22280.0		ship stations calling, ch 2	CW	group I
22280.5		ship stations calling, ch 3	CW	common channel
22281.0		ship stations calling, ch 4	CW	common channel
22281.5		ship stations calling, ch 5	CW	group II
22282.0		ship stations calling, ch 6	CW	group II
22282.5		ship stations calling, ch 7	CW	group III
22283.0		ship stations calling, ch 8	CW	group III
22283.5		ship stations calling, ch 9	CW	group IV
22284.0		ship stations calling, ch 10	CW	group IV
22284.5		ship stations, channel 1	QSX	22376.5 kHz
22285.0		ship stations, channel 2	QSX	22377.0 kHz
22285.5		ship stations, channel 3	QSX	22377.5 kHz
22286.0		ship stations, channel 4	QSX	22378.0 kHz
22286.5		ship stations, channel 5	QSX	22378.5 kHz
22287.0		ship stations, channel 6	QSX	22379.0 kHz
22287.5		ship stations, channel 7	QSX	22379.5 kHz
22288.0		ship stations, channel 8	QSX	22380.0 kHz
22288.5		ship stations, channel 9	QSX	22380.5 kHz
22289.0		ship stations, channel 10	QSX	22381.0 kHz
22289.5		ship stations, channel 11	QSX	22381.5 kHz
22290.0		ship stations, channel 12	QSX	22382.0 kHz
22290.5		ship stations, channel 13	QSX	22382.5 kHz
22291.0		ship stations, channel 14	QSX	22383.0 kHz
22291.5		ship stations, channel 15	QSX	22383.5 kHz
22292.0		ship stations, channel 16	QSX	22384.0 kHz
22292.5		ship stations, channel 17	QSX	22384.5 kHz
22293.0		ship stations, channel 18	QSX	22385.0 kHz
22293.5		ship stations, channel 19	QSX	22385.5 kHz
22294.0		ship stations, channel 20	QSX	22386.0 kHz
22294.5		ship stations, channel 21	QSX	22386.5 kHz
22295.0		ship stations, channel 22	QSX	22387.0 kHz
22295.5		ship stations, channel 23	QSX	22387.5 kHz
22296.0		ship stations, channel 24	QSX	22388.0 kHz
22296.5		ship stations, channel 25	QSX	22388.5 kHz
22297.0		ship stations, channel 26	QSX	22389.0 kHz
22297.5		ship stations, channel 27	QSX	22389.5 kHz
22298.0		ship stations, channel 28	QSX	22390.0 kHz
22298.5		ship stations, channel 29	QSX	22390.5 kHz
22299.0		ship stations, channel 30	QSX	22391.0 kHz
22299.5		ship stations, channel 31	QSX	22391.5 kHz
22300.0		ship stations, channel 32	QSX	22392.0 kHz
22300.5		ship stations, channel 33	QSX	22392.5 kHz
22301.0		ship stations, channel 34	QSX	22393.0 kHz
22301.5		ship stations, channel 35	QSX	22393.5 kHz
22302.0		ship stations, channel 36	QSX	22394.0 kHz
22302.5		ship stations, channel 37	QSX	22394.5 kHz
22303.0		ship stations, channel 38	QSX	22395.0 kHz
22303.5		ship stations, channel 39	QSX	22395.5 kHz
22304.0		ship stations, channel 40	QSX	22396.0 kHz
22304.5		ship stations, channel 41	QSX	22396.5 kHz
22305.0		ship stations, channel 42	QSX	22397.0 kHz
22305.5		ship stations, channel 43	QSX	22397.5 kHz
22306.0		ship stations, channel 44	QSX	22398.0 kHz
22306.5		ship stations, channel 45	QSX	22398.5 kHz

22307.0	ship stations, channel 46	QSX 22399.0 kHz
22307.5	ship stations, channel 47	QSX 22399.5 kHz
22308.0	ship stations, channel 48	QSX 22400.0 kHz
22308.5	ship stations, channel 49	QSX 22400.5 kHz
22309.0	ship stations, channel 50	QSX 22401.0 kHz
22309.5	ship stations, channel 51	QSX 22401.5 kHz
22310.0	ship stations, channel 52	QSX 22402.0 kHz
22310.5	ship stations, channel 53	QSX 22402.5 kHz
22311.0	ship stations, channel 54	QSX 22403.0 kHz
22311.5	ship stations, channel 55	QSX 22403.5 kHz
22312.0	ship stations, channel 56	QSX 22404.0 kHz
22312.5	ship stations, channel 57	QSX 22404.5 kHz
22313.0	ship stations, channel 58	QSX 22405.0 kHz
22313.5	ship stations, channel 59	QSX 22405.5 kHz
22314.0	ship stations, channel 60	QSX 22406.0 kHz
22314.5	ship stations, channel 61	QSX 22406.5 kHz
22315.0	ship stations, channel 62	QSX 22407.0 kHz
22315.5	ship stations, channel 63	QSX 22407.5 kHz
22316.0	ship stations, channel 64	QSX 22408.0 kHz
22316.5	ship stations, channel 65	QSX 22408.5 kHz
22317.0	ship stations, channel 66	QSX 22409.0 kHz
22317.5	ship stations, channel 67	QSX 22409.5 kHz
22318.0	ship stations, channel 68	QSX 22410.0 kHz
22318.5	ship stations, channel 69	QSX 22410.5 kHz
22319.0	ship stations, channel 70	QSX 22411.0 kHz
22319.5	ship stations, channel 71	QSX 22411.5 kHz
22320.0	ship stations, channel 72	QSX 22412.0 kHz
22320.5	ship stations, channel 73	QSX 22412.5 kHz
22321.0	ship stations, channel 74	QSX 22413.0 kHz
22321.5	ship stations, channel 75	QSX 22413.5 kHz
22322.0	ship stations, channel 76	QSX 22414.0 kHz
22322.5	ship stations, channel 77	QSX 22414.5 kHz
22323.0	ship stations, channel 78	QSX 22415.0 kHz
22323.5	ship stations, channel 79	QSX 22415.5 kHz
22324.0	ship stations, channel 80	QSX 22416.0 kHz
22324.5	ship stations, channel 81	QSX 22416.5 kHz
22325.0	ship stations, channel 82	QSX 22417.0 kHz
22325.5	ship stations, channel 83	QSX 22417.5 kHz
22326.0	ship stations, channel 84	QSX 22418.0 kHz
22326.5	ship stations, channel 85	QSX 22418.5 kHz
22327.0	ship stations, channel 86	QSX 22419.0 kHz
22327.5	ship stations, channel 87	QSX 22419.5 kHz
22328.0	ship stations, channel 88	QSX 22420.0 kHz
22328.5	ship stations, channel 89	QSX 22420.5 kHz
22329.0	ship stations, channel 90	QSX 22421.0 kHz
22329.5	ship stations, channel 91	QSX 22421.5 kHz
22330.0	ship stations, channel 92	QSX 22422.0 kHz
22330.5	ship stations, channel 93	QSX 22422.5 kHz
22331.0	ship stations, channel 94	QSX 22423.0 kHz
22331.5	ship stations, channel 95	QSX 22423.5 kHz
22332.0	ship stations, channel 96	QSX 22424.0 kHz
22332.5	ship stations, channel 97	QSX 22424.5 kHz
22333.0	ship stations, channel 98	QSX 22425.0 kHz
22333.5	ship stations, channel 99	QSX 22425.5 kHz
22334.0	ship stations, channel 100	QSX 22426.0 kHz
22334.5	ship stations, channel 101	QSX 22426.5 kHz
22335.0	ship stations, channel 102	QSX 22427.0 kHz
22335.5	ship stations, channel 103	QSX 22427.5 kHz
22336.0	ship stations, channel 104	QSX 22428.0 kHz
22336.5	ship stations, channel 105	QSX 22428.5 kHz

22337.0	ship stations, channel 106	QSX 22429.0 kHz
22337.5	ship stations, channel 107	QSX 22429.5 kHz
22338.0	ship stations, channel 108	QSX 22430.0 kHz
22338.5	ship stations, channel 109	QSX 22430.5 kHz
22339.0	ship stations, channel 110	QSX 22431.0 kHz
22339.5	ship stations, channel 111	QSX 22431.5 kHz
22340.0	ship stations, channel 112	QSX 22432.0 kHz
22340.5	ship stations, channel 113	QSX 22432.5 kHz
22341.0	ship stations, channel 114	QSX 22433.0 kHz
22341.5	ship stations, channel 115	QSX 22433.5 kHz
22342.0	ship stations, channel 116	QSX 22434.0 kHz
22342.5	ship stations, channel 117	QSX 22434.5 kHz
22343.0	ship stations, channel 118	QSX 22435.0 kHz
22343.5	ship stations, channel 119	QSX 22435.5 kHz
22344.0	ship stations, channel 120	QSX 22436.0 kHz
22344.5	ship stations, channel 121	QSX 22436.5 kHz
22345.0	ship stations, channel 122	QSX 22437.0 kHz
22345.5	ship stations, channel 123	QSX 22437.5 kHz
22346.0	ship stations, channel 124	QSX 22438.0 kHz
22346.5	ship stations, channel 125	QSX 22438.5 kHz
22347.0	ship stations, channel 126	QSX 22439.0 kHz
22347.5	ship stations, channel 127	QSX 22439.5 kHz
22348.0	ship stations, channel 128	QSX 22440.0 kHz
22348.5	ship stations, channel 129	QSX 22440.5 kHz
22349.0	ship stations, channel 130	QSX 22441.0 kHz
22349.5	ship stations, channel 131	QSX 22441.5 kHz
22350.0	ship stations, channel 132	QSX 22442.0 kHz
22350.5	ship stations, channel 133	QSX 22442.5 kHz
22351.0	ship stations, channel 134	QSX 22443.0 kHz
22351.5	ship stations, channel 135	QSX 22443.5 kHz
22352.0	ship stations, channel 1	non-paired
	ship stations	QSX 22649.7 kHz (SAB 93)
22352.5	ship stations, channel 2	non-paired
	ship stations	QSX 22505.0 kHz (SPB 93)
22353.0	ship stations, channel 3	non-paired
22353.5	ship stations, channel 4	non-paired
22354.0	ship stations, channel 5	non-paired
22354.5	ship stations, channel 6	non-paired
22355.0	ship stations, channel 7	non-paired
22355.5	ship stations, channel 8	non-paired
22356.0	ship stations, channel 9	non-paired
22356.5	ship stations, channel 10	non-paired
22357.0	ship stations, channel 11	non-paired
22357.5	ship stations, channel 12	non-paired
22358.0	ship stations, channel 13	non-paired
22358.5	ship stations, channel 14	non-paired
22359.0	ship stations, channel 15	non-paired
22359.5	ship stations, channel 16	non-paired
22360.0	ship stations, channel 17	non-paired
22360.5	ship stations, channel 18	non-paired
22361.0	ship stations, channel 19	non-paired
22361.5	ship stations, channel 20	non-paired
22362.0	ship stations, channel 21	non-paired
22362.5	ship stations, channel 22	non-paired
22363.0	ship stations, channel 23	non-paired
22363.5	ship stations, channel 24	non-paired
22364.0	ship stations, channel 25	non-paired
22364.5	ship stations, channel 26	non-paired
22365.0	ship stations, channel 27	non-paired
22365.5	ship stations, channel 28	non-paired

22366.0		ship stations, channel 29	non-paired
22366.5		ship stations, channel 30	non-paired
22367.0		ship stations, channel 31	non-paired
22367.5		ship stations, channel 32	non-paired
22368.0		ship stations, channel 33	non-paired
22368.5		ship stations, channel 34	non-paired
22369.0		ship stations, channel 35	non-paired
22369.5		ship stations, channel 36	non-paired
22370.0		ship stations, channel 37	non-paired
22370.5		ship stations, channel 38	non-paired
22371.0		ship stations, channel 39	non-paired
22371.5		ship stations, channel 40	non-paired
22372.0		ship stations, channel 41	non-paired
22372.5		ship stations, channel 42	non-paired
22373.0		ship stations, channel 43	non-paired
22373.5		ship stations, channel 44	non-paired
22374.0		ship stations, channel 45	non-paired
22374.5	WORLDWIDE	SHIP STATIONS DSC FREQUENCY	QSX 22444.0 kHz
22375.0	WORLDWIDE	SHIP STATIONS DSC FREQUENCY	
22375.5	WORLDWIDE	SHIP STATIONS DSC FREQUENCY	
22376.0	WORLDWIDE	NBDPT MSI FREQUENCY	
	NMC	USCG San Francisco, CA, USA	SITOR-B: 0530 navigational warnings
	NMO	USCG Honolulu, HWA	SITOR-B: 0730 schedule
22376.5		coast stations, channel 1	QSX 22284.5 kHz
	JFA	*Funabashi F R, J*	*scheduled*
	KFS	*San Francisco R, CA, USA*	*scheduled*
	YLQ	*Riga R, LVA*	*scheduled*
	9MG 18	*Georgetown R, Pin. I., MLA*	*scheduled*
22377.0		coast stations, channel 2	QSX 22285.0 kHz
	GKE 7	Portishead R, G	SITOR-A: 0458-1925 tts CW
	PKX	*Jakarta R, INS*	*scheduled*
	WNU	*Slidell R, LA, USA*	*scheduled*
	ZLA	*Awanui R, NZL*	*scheduled*
22377.5		coast stations, channel 3	QSX 22285.0 kHz
	KFS	San Francisco R, CA, USA	SITOR-A: 1630-0558 tts CW
	SPA 91	*Gdynia R, POL*	*scheduled*
	XSV	*Tianjin R, CHN*	*scheduled*
	9VG	Singapore R, SNG	SITOR-A: 0822 tts CW
22378.0		coast stations, channel 4	QSX 22286.0 kHz
	FFT 91	Saint Lys R, F	SITOR-A: 1616 tts CW
	LSD 836	*Buenos Aires R, ARG*	*scheduled*
	ZLA	*Awanui R, NZL*	*scheduled*
22378.5		coast stations, channel 5	QSX 22286.5 kHz
	CNP	*Casablanca R, MRC*	*scheduled*
	D4A	*Mindelo R, S. Vicente, CPV*	*scheduled*
22379.0		coast stations, channel 6	QSX 22287.0 kHz
	EAD	Madrid R, E	SITOR-B: 0100 + 0300 + 0500 + 0700 + 0900 + 1100 + 1300 + 1500 + 1700 + 1900 + 2100 + 2300 tfc list
	SPB 91	*Szczecin R, POL*	*scheduled*
	VRX	Victoria Harbour R, HKG	SITOR-A: 0054-1335 tts CW
22379.5		coast stations, channel 7	QSX 22287.5 kHz
	JCS	*Choshi R, J*	*scheduled*

22379.5	SAB 907	Goeteborg R, S	SITOR-A: 0736-1826 tts
	WAH	*Saint Thomas R, VIR*	*scheduled*
	XSG	*Shanghai R, CHN*	*scheduled*
22380.0		coast stations, channel 8	QSX 22288.0 kHz
	PCH 75	Scheveningen R, NLD	SITOR-A: 0656-1743 tts CW
	UTQ	*Kiyev R, UKR*	*scheduled*
22380.5		coast stations, channel 9	QSX 22288.5 kHz
	CBV	*Valparaiso R, CHL*	*scheduled*
22381.0		coast stations, channel 10	QSX 22289.0 kHz
	D4A	*Mindelo R, S. Vicente, CPV*	*scheduled*
	WLO	Mobile R, AL, USA	SITOR-A: 0114 + 0900-1947 + 2322 tts CW
	9VG 84	Singapore R, SNG	SITOR-A: 0001-1746 tts SITOR-B: 0030 wx, 0130 + 0330 + 0530 + 0730 + 0930 + 1130 tfc list, 1230 wx, 1330 + 1530 + 1730 + 1930 + 2130 + 2330 tfc list CW
22381.5		coast stations, channel 11	QSX 22289.5 kHz
	CBV	*Valparaiso R, CHL*	*scheduled*
	HEC 52	Berne R, SUI	SITOR-A: 0656-1903 tts SITOR-B: 0030 + 0230 + 0430 + 0630 + 0830 + 1030 tfc list, 1230 tfc list, schedule, 1430 + 1630 + 1830 + 2030 + 2230 tfc list CW
	XSQ	*Guangzhou R, CHN*	*scheduled*
22382.0		coast stations, channel 12	QSX 22290.0 kHz
	HLS	*Soul R, KOR*	*scheduled*
22382.5		coast stations, channel 13	QSX 22290.5 kHz
	FFT 92	*Saint Lys R, F*	*scheduled*
	KPH	San Francisco R, CA, USA	SITOR-A: 0013 + 0115 + 0558 tts SITOR-B: 1700 tfc list CW
	WCC	*Chatham R, MA, USA*	*scheduled*
22383.0		coast stations, channel 14	QSX 22291.0 kHz
	KPH	*San Francisco R, CA, USA*	*scheduled*
	LSD 836	*Buenos Aires R, ARG*	*scheduled*
	VIP 71	*Perth R, WA, AUS*	*scheduled*
	WCC	*Chatham R, MA, USA*	*scheduled*
22383.5		coast stations, channel 15	QSX 22291.5 kHz
	WLO	Mobile R, AL, USA	SITOR-A: 24 h tts CW
22384.0		coast stations, channel 16	QSX 22292.0 kHz
	JOS	*Nagasaki R, J*	*scheduled*
	UGH	*Provideniya R, FE, RUS*	*scheduled*
	VWM	*Madras R, IND*	*scheduled*
	9GX	*Tema R, GHA*	*scheduled*
22384.5		coast stations, channel 17	QSX 22292.5 kHz
	SVS 7	*Athens R, GRC*	*scheduled*
22385.0		coast stations, channel 18	QSX 22293.0 kHz
	LSD 836	*Buenos Aires R, ARG*	*scheduled*

22385.0	OXZ	Lyngby R, DNK	SITOR-A: 0650-1903 tts SITOR-B: 0130+0330+0530+0730+0930+1130+1330+1530+1730+1930+2130+2330 tfc list CW
	9VG 85	Singapore R, SNG	SITOR-A: 0823+0942 tts CW
22385.5		coast stations, channel 19	QSX 22293.5 kHz
	WNU	Slidell R, LA, USA	SITOR-A: 0111 tts CW
	YLQ	*Riga R, LVA*	*scheduled*
22386.0		coast stations, channel 20	QSX 22294.0 kHz
	EAD	*Madrid R, E*	*scheduled*
	HZG	*Dammam R, ARS*	*scheduled*
	UFL	*Vladivostok R, SE, RUS*	*scheduled*
	UFN	Novorossiysk R, RUS	SITOR-A: 1019-2000 R tts wtsca CW
	9AR	*Rijeka R, HRV*	*scheduled*
22386.5		coast stations, channel 21	QSX 22294.5 kHz
	CNP	*Casablanca R, MRC*	*scheduled*
	IAR	*Rome R, I*	*scheduled*
	KPH	*San Francisco R, CA, USA*	*scheduled*
	LZW 83	*Varna R, BUL*	*scheduled*
	WCC	Chatham R, MA, USA	SITOR-A: 0059+1000-1902 tts SITOR-B: 0040+0240 tfc list; 0440 tfc list, wx; 0640+0840+1040 tfc list; 1240 tfc list, wx; 1440 tfc list; 1640 tfc list, wx; 1840+2040+2240 tfc list CW
22387.0		coast stations, channel 22	QSX 22295.0 kHz
	KPH	*San Francisco R, CA, USA*	*scheduled*
	3AC 42	*Monte Carlo R, MCO*	*scheduled*
22387.5		coast stations, channel 23	QSX 22295.5 kHz
	SVT 7	Athens R, GRC	SITOR-A: 0745-1902 tts SITOR-B: 1020 tfc list CW
	YLQ	*Riga R, LVA*	*scheduled*
22388.0		coast stations, channel 24	QSX 22296.0 kHz
	JFA	*Funabashi F R, J*	*scheduled*
22388.5		coast stations, channel 25	QSX 22296.5 kHz
	FFT 93	*Saint Lys R, F*	*scheduled*
22389.0		coast stations, channel 26	QSX 22297.0 kHz
	9VG 98	Singapore R, SNG	SITOR-A: 0104-1748 tts CW
22389.5		coast stations, channel 27	QSX 22297.5 kHz
	IAR	*Rome R, I*	*scheduled*
22390.0		coast stations, channel 28	QSX 22298.0 kHz
	KFS	*San Francisco R, CA, USA*	*scheduled*
	LZW 84	*Varna R, BUL*	*scheduled*
22390.5		coast stations, channel 29	QSX 22298.5 kHz
22391.0		coast stations, channel 30	QSX 22299.0 kHz
	DAN	Norddeich R, D	SITOR-A: 0506-1742 tts CW
	9AR	*Rijeka R, HRV*	*scheduled*
22391.5		coast stations, channel 31	QSX 22299.5 kHz
	HPP	Panama R, PNR	SITOR-A: 1518 tts
	VAI	CCG Vancouver, BC, CAN	SITOR-B: 0200+0230+0700+0730+1900+1930 wx

22392.0		coast stations, channel 32	QSX 22300.0 kHz
	SAB 932	*Goeteborg R, S*	*scheduled*
22392.5		coast stations, channel 33	QSX 22300.5 kHz
22393.0		coast stations, channel 34	QSX 22301.0 kHz
	GKP 7	*Portishead R, G*	*scheduled*
	UUI	Odessa R, UKR	SITOR-A: 0717+1745 R tts wtsca CW
	9VG 99	*Singapore R, SNG*	*scheduled*
22393.5		coast stations, channel 35	QSX 22301.5 kHz
	3AC 52	*Monte Carlo R, MCO*	*scheduled*
22394.0		coast stations, channel 36	QSX 22302.0 kHz
	CLA	*Habana R, CUB*	*scheduled*
	OXZ	*Lyngby R, DNK*	*scheduled*
22394.5		coast stations, channel 37	QSX 22302.5 kHz
	LPD	General Pacheco R, ARG	SITOR-A: 1204-2010 tts CW
22395.0		coast stations, channel 38	QSX 22303.0 kHz
	KPH	San Francisco R, CA, USA	SITOR-A: 1730-0557 tts CW
	OFA	*Helsinki R, FIN*	*scheduled*
	USU	Mariupol R, UKR	ITA2 50 Bd: 0517-1537 R tts wtsca CW
	WCC	*Chatham R, MA, USA*	*scheduled*
	YLQ	*Riga R, LVA*	*scheduled*
22395.5		coast stations, channel 39	QSX 22303.5 kHz
	FFT 95	*Saint Lys R, F*	*scheduled*
	LPD	*General Pacheco R, ARG*	*scheduled*
22396.0		coast stations, channel 40	QSX 22304.0 kHz
	D4A	*Mindelo R, S. Vicente, CPV*	*scheduled*
	EAD	Madrid R, E	SITOR-B: 0100+0300+0500+0700+0900+1100+1300+1500+1700+1900+2100+2300 tfc list
	KLB	*Seattle R, WA, USA*	*scheduled*
22396.5		coast stations, channel 41	QSX 22304.5 kHz
	UHS	*Murmansk R, RUS*	*scheduled*
22397.0		coast stations, channel 42	QSX 22305.0 kHz
	GKL 7	*Portishead R, G*	*scheduled*
	UUI	*Odessa R, UKR*	*scheduled*
	9AR	*Rijeka R, HRV*	*scheduled*
22397.5		coast stations, channel 43	QSX 22305.5 kHz
	HPP	*Panama R, PNR*	*scheduled*
	UFL	*Vladivostok R, SE, RUS*	*scheduled*
	7TK 30	*Boufarik R, ALG*	*scheduled*
22398.0		coast stations, channel 44	QSX 22306.0 kHz
	IAR	*Rome R, I*	*scheduled*
	UBE	*Petropavl.-Km. R, FE, RUS*	*scheduled*
22398.5		coast stations, channel 45	QSX 22306.5 kHz
	KEJ	Hoolehua R, HWA	SITOR-B: H+15 tfc list
22399.0		coast stations, channel 46	QSX 22307.0 kHz
	A9M	Hamala R, BHR	SITOR-A: 0530-1528 tts CW
22399.5		coast stations, channel 47	QSX 22307.5 kHz
	KFS	*San Francisco R, CA, USA*	*scheduled*
22400.0		coast stations, channel 48	QSX 22308.0 kHz
22400.5		coast stations, channel 49	QSX 22308.5 kHz
	SVU 7	*Athens R, GRC*	*scheduled*

22401.0		coast stations, channel 50	QSX 22309.0 kHz
	HEC 62	Berne R, SUI	SITOR-A: 0743-1858 tts CW
22401.5		coast stations, channel 51	QSX 22309.5 kHz
	SPB 94	*Szczecin R, POL*	*scheduled*
22402.0		coast stations, channel 52	QSX 22310.0 kHz
	LGG 3	Rogaland R, NOR	SITOR-A: 0653-1858 tts CW
	WNU	*Slidell R, LA, USA*	*scheduled*
22402.5		coast stations, channel 53	QSX 22310.5 kHz
22403.0		coast stations, channel 54	QSX 22311.0 kHz
	CNP	*Casablanca R, MRC*	*scheduled*
	WLO	Mobile R, AL, USA	SITOR-A: 0120-1858 tts CW
22403.5		coast stations, channel 55	QSX 22311.5 kHz
22404.0		coast stations, channel 56	QSX 22312.0 kHz
	UFC	*Nakhodka R, SE, RUS*	*scheduled*
	UFN	*Novorossiysk R, RUS*	*scheduled*
	WLO	*Mobile R, AL, USA*	*scheduled*
22404.5		coast stations, channel 57	QSX 22312.5 kHz
	SPB 95	*Szczecin R, POL*	*scheduled*
	WNU	*Slidell R, LA, USA*	*scheduled*
22405.0		coast stations, channel 58	QSX 22313.0 kHz
	GKY 7	*Portishead R, G*	*scheduled*
	UUI	Odessa R, UKR	SITOR-A: 0806 + 0830 + 0854 + 1334 + 1451 R tts wtsca CW
22405.5		coast stations, channel 59	QSX 22313.5 kHz
	OXZ	*Lyngby R, DNK*	*scheduled*
22406.0		coast stations, channel 60	QSX 22314.0 kHz
	UAT	*Moscow R, RUS*	*scheduled*
	WLO	Mobile R, AL, USA	SITOR-A: 0508-1857 tts CW
	3AC 62	*Monte Carlo R, MCO*	*scheduled*
22406.5		coast stations, channel 61	QSX 22314.5 kHz
	CUL	*Lisbon R, POR*	*scheduled*
22407.0		coast stations, channel 62	QSX 22315.0 kHz
	IAR	*Rome R, I*	*scheduled*
	WLO	Mobile R, AL, USA	SITOR-A: 1219-1857 tts CW
22407.5		coast stations, channel 63	QSX 22315.5 kHz
	LZW 85	*Varna R, BUL*	*scheduled*
	UAT	Moscow R, RUS	SITOR-A: 0739-1707 R tts wtsca CW
	VCT	*Tors Cove R, NFLD, CAN*	*scheduled*
22408.0		coast stations, channel 64	QSX 22316.0 kHz
	SPB 92	*Szczecin R, POL*	*scheduled*
	ZSC 65	*Cape Town R, AFS*	*scheduled*
22408.5		coast stations, channel 65	QSX 22316.5 kHz
	UFL	*Vladivostok R, SE, RUS*	*scheduled*
	7TK 31	*Boufarik R, ALG*	*scheduled*
22409.0		coast stations, channel 66	QSX 22317.0 kHz
	GKQ 7	*Portishead R, G*	*scheduled*
	SPA 92	*Gdynia R, POL*	*scheduled*
22409.5		coast stations, channel 67	QSX 22317.5 kHz
22410.0		coast stations, channel 68	QSX 22318.0 kHz
	UCE	*Arkhangelsk R, RUS*	*scheduled*
22410.5		coast stations, channel 69	QSX 22318.5 kHz
	9GX	*Tema R, GHA*	*scheduled*

22411.0		coast stations, channel 70	QSX 22319.0 kHz
	TAH	*Istanbul R, TUR*	*scheduled*
22411.5		coast stations, channel 71	QSX 22319.5 kHz
22412.0		coast stations, channel 72	QSX 22320.0 kHz
	WLO	Mobile R, AL, USA	SITOR-A: 1457-1859 + 2321 tts CW
22412.5		coast stations, channel 73	QSX 22320.5 kHz
22413.0		coast stations, channel 74	QSX 22321.0 kHz
22413.5		coast stations, channel 75	QSX 22321.5 kHz
22414.0		coast stations, channel 76	QSX 22322.0 kHz
22414.5		coast stations, channel 77	QSX 22322.5 kHz
22415.0		coast stations, channel 78	QSX 22323.0 kHz
22415.5		coast stations, channel 79	QSX 22323.5 kHz
22416.0		coast stations, channel 80	QSX 22324.0 kHz
22416.5		coast stations, channel 81	QSX 22324.5 kHz
22417.0		coast stations, channel 82	QSX 22325.0 kHz
22417.5		coast stations, channel 83	QSX 22325.5 kHz
22418.0		coast stations, channel 84	QSX 22326.0 kHz
	WLO	Mobile R, AL, USA	SITOR-A: 0123 + 1339-1525 + 2250 tts CW
22418.5		coast stations, channel 85	QSX 22326.5 kHz
22419.0		coast stations, channel 86	QSX 22327.0 kHz
	TAH	*Istanbul R, TUR*	*scheduled*
22419.5		coast stations, channel 87	QSX 22327.5 kHz
22420.0		coast stations, channel 88	QSX 22328.0 kHz
	XSQ	Guangzhou R, CHN	SITOR-A: 0108-0943 tts SITOR-B: 0710 tfc list CW
22420.5		coast stations, channel 89	QSX 22328.5 kHz
22421.0		coast stations, channel 90	QSX 22329.0 kHz
22421.5		coast stations, channel 91	QSX 22329.5 kHz
	SAB 991	*Goeteborg R, S*	*scheduled*
22422.0		coast stations, channel 92	QSX 22330.0 kHz
22422.5		coast stations, channel 93	QSX 22330.5 kHz
22423.0		coast stations, channel 94	QSX 22331.0 kHz
22423.5		coast stations, channel 95	QSX 22331.5 kHz
22424.0		coast stations, channel 96	QSX 22332.0 kHz
22424.5		coast stations, channel 97	QSX 22332.5 kHz
22425.0		coast stations, channel 98	QSX 22333.0 kHz
22425.5		coast stations, channel 99	QSX 22333.5 kHz
22426.0		coast stations, channel 100	QSX 22334.0 kHz
	LZW 86	*Varna R, BUL*	*scheduled*
22426.5		coast stations, channel 101	QSX 22334.5 kHz
22427.0		coast stations, channel 102	QSX 22335.0 kHz
22427.5		coast stations, channel 103	QSX 22335.5 kHz
22428.0		coast stations, channel 104	QSX 22336.0 kHz
	XSG	*Shanghai R, CHN*	*scheduled*
22428.5		coast stations, channel 105	QSX 22336.5 kHz
22429.0		coast stations, channel 106	QSX 22337.0 kHz
	SAB 906	*Goeteborg R, S*	*scheduled*
	XSG	*Shanghai R, CHN*	*scheduled*
22429.5		coast stations, channel 107	QSX 22337.5 kHz
22430.0		coast stations, channel 108	QSX 22338.0 kHz
22430.5		coast stations, channel 109	QSX 22338.5 kHz
22431.0		coast stations, channel 110	QSX 22339.0 kHz
22431.5		coast stations, channel 111	QSX 22339.5 kHz
22432.0		coast stations, channel 112	QSX 22340.0 kHz
22432.5		coast stations, channel 113	QSX 22340.5 kHz
22433.0		coast stations, channel 114	QSX 22341.0 kHz

22433.5		coast stations, channel 115	QSX 22341.5 kHz
22434.0		coast stations, channel 116	QSX 22342.0 kHz
	XSG	*Shanghai R, CHN*	*scheduled*
22434.5		coast stations, channel 117	QSX 22342.5 kHz
22435.0		coast stations, channel 118	QSX 22343.0 kHz
	XSQ	*Guangzhou R, CHN*	*scheduled*
22435.5		coast stations, channel 119	QSX 22343.5 kHz
22436.0		coast stations, channel 120	QSX 22344.0 kHz
	TAH	*Istanbul R, TUR*	*scheduled*
22436.5		coast stations, channel 121	QSX 22344.5 kHz
22437.0		coast stations, channel 122	QSX 22345.0 kHz
	SAB 922	*Goeteborg R, S*	*scheduled*
22437.5		coast stations, channel 123	QSX 22345.5 kHz
22438.0		coast stations, channel 124	QSX 22346.0 kHz
22438.5		coast stations, channel 125	QSX 22346.5 kHz
22439.0		coast stations, channel 126	QSX 22347.0 kHz
22439.5		coast stations, channel 127	QSX 22347.5 kHz
22440.0		coast stations, channel 128	QSX 22348.0 kHz
22440.5		coast stations, channel 129	QSX 22348.5 kHz
22441.0		coast stations, channel 130	QSX 22349.0 kHz
22441.5		coast stations, channel 131	QSX 22349.5 kHz
22442.0		coast stations, channel 132	QSX 22350.0 kHz
22442.5		coast stations, channel 133	QSX 22350.5 kHz
22443.0		coast stations, channel 134	QSX 22351.0 kHz
	OST 79	Oostende R, BEL	SITOR-A: 0737-1856 tts CW
22443.5		coast stations, channel 135	QSX 22351.5 kHz
22444.0	WORLDWIDE	COAST STATIONS DSC FREQUENCY	QSX 22374.5 kHz
22444.5	WORLDWIDE	COAST STATIONS DSC FREQUENCY	
22445.0	WORLDWIDE	COAST STATIONS DSC FREQUENCY	
22446.0	EAD 6	Madrid R, E	CW
22447.0	CBV	Valparaiso R, CHL	CW
	FUV	FN Jibuti, DJI	ITA2 75 Bd: 0943+1018 ry
22448.7	GKB 7	Portishead R, G	CW
22450.0	PPO	Olinda R, B	CW
22452.0	XSQ	Guangzhou R, CHN	CW
22454.0	HPP	Panama R, PNR	CW
22455.0	UFH	Petropavl.-Km. R, FE, RUS	CW
	YLQ	Riga R, LVA	CW
22458.0	WNU	Slidell R, LA, USA	CW
22459.0	OXZ 93	Lyngby R, DNK	CW
	XSX	Chi-lung R, TAI	CW
22461.0	FUJ	FN Noumea, NCL	ITA2 75 Bd: 0310+0455+2115 +2216 ry
22463.0	JCU	Choshi R, J	CW
22464.0	UUI	Odessa R, UKR	ITA2 50 Bd: 0922-1602 R tts wtsca CW
22465.0	OBF	Mollendo R, PRU	CW
	XFA	Acapulco R, MEX	CW
22467.0	GKA 7	Portishead R, G	CW
22471.0	XDA	Mexico City R, MEX	CW
22471.5	SVD 7	Athens R, GRC	CW
22472.0	NMO	USCG Honolulu, HWA	CW
22473.0	CBV	Valparaiso R, CHL	CW
22473.5	LFG	Rogaland R, NOR	CW
22475.0	PPL	Belem R, B	CW
22477.0	XFU	Veracruz R, MEX	CW
22477.5	KPH	San Francisco R, CA, USA	CW
22479.0	KPH	San Francisco R, CA, USA	CW

22479.0	9VG 27	Singapore R, SNG	CW
22482.0	HLG	Soul R, KOR	CW
22484.0	HZG	Dammam R, ARS	CW
22485.0	VIX 7	RAN Canberra, ACT, AUS	CW
22486.0	LZW 88	Varna R, BUL	CW
22487.0	WLO	Mobile R, AL, USA	CW
	XSV	Tianjin R, CHN	CW
22488.5	7TF 12	Boufarik R, ALG	CW
22490.0	DZZ	Manila R, PHL	CW
	5RS	Toamasina R, MDG	CW
22491.0	ELC	Monrovia R, LBR	CW
22493.0	**UAT**	**Moscow R, RUS**	**ITA2 50 Bd: 0928 R tts wtsca** CW
22494.0	GKK 7	Portishead R, G	CW
22495.0	SPH 91	Gdynia R, POL	CW
22496.0	PPJ	Juncao R, B	CW
22498.5	7TF 12	Boufarik R, ALG	CW
22499.0	HPP	Panama R, PNR	CW
22500.0	SVF 7	Athens R, GRC	CW
22501.0	**UFN**	**Novorossiysk R, RUS**	**ITA2 50 Bd: 1136-1837 R tts wtsca** CW
22503.0	GKG 7	Portishead R, G	CW
22504.0	9KK 23	Safat R, KWT	CW
22505.0	*SPB 93*	*Szczecin R, POL*	*scheduled; QSX 22352.5 kHz*
	SPE 91	Szczecin R, POL	CW
22506.0	DZI	Bacoor R, PHL	CW
22509.0	FFL 9	Saint Lys R, F	CW
22511.0	XFN	Progreso R, MEX	CW
22512.0	UAT	Moscow R, RUS	CW
22513.5	LPD 91	General Pacheco R, ARG	CW
22515.0	KFS	San Francisco R, CA, USA	CW
22516.0	XDA	Mexico City R, MEX	CW
22518.0	WCC	Chatham R, MA, USA	CW
22521.0	WCC	Chatham R, MA, USA	CW
22525.0	IRM	CIRM Rome, I	CW
	UAI	Nakhodka R, SE, RUS	CW
	XSQ	Guangzhou R, CHN	CW
22525.5	GKH 7	Portishead R, G	CW
22527.0	GKM 7	Portishead R, G	CW
	NMC	*USCG S. Franc., CA, USA*	*FAX // 4346.0 kHz $*
	USU	**Mariupol R, UKR**	**ITA2 50 Bd: 0711-1205 R tts wtsca** CW
22528.5	GKI 7	Portishead R, G	CW
22530.0	URL	Sevastopol' R, UKR	CW
22533.0	EDZ 7	Madrid R, E	CW
22534.0	PPR	Rio de Janeiro R, B	CW
22536.0	VRX	Victoria Harbour R, HKG	CW
22537.0	**FUF**	**FN Fort de France, MRT**	**ITA2 75 Bd: 1600 + 2000 ry**
22538.0	DZN	Navotas R, PHL	CW
22539.0	KLB	Seattle R, WA, USA	CW
22542.0	*JJC*	*KYODO Tokyo, J*	*FAX // 4316.0 kHz $*
22543.0	7TF 12	Boufarik R, ALG	CW
22545.0	GKJ 7	Portishead R, G	CW
22546.0	CBV	Valparaiso R, CHL	CW
22548.0	TAH	Istanbul R, TUR	CW
22550.0	3AC 32	Monte Carlo R, MCO	CW
22551.0	SPE 92	Szczecin R, POL	CW
	VWB	Mumbai R, IND	CW

22555.0	OBQ	Iquitos R, PRU	CW
	UUI	Odessa R, UKR	CW
22557.0	KPH	San Francisco R, CA, USA	CW
22560.0	**URL**	**Sevastopol' R, UKR**	**ITA2 50 Bd: 0809 ry, R tfc list wtsca; 0810+1312+1403 R tts wtsca**
			CW
22563.5	9AR	Rijeka R, HRV	CW
22565.0	XSW	Kao-hsiung R, TAI	CW
22571.0	UFL	Vladivostok R, SE, RUS	CW
22575.5	PKX	Jakarta R, INS	CW
	WNU	Slidell R, LA, USA	CW
22576.5	JNA	JN Tokyo, J	CW
	URL	Sevastopol' R, UKR	CW
22578.5	9VG 59	Singapore R, SNG	CW
22581.0	D4A	Mindelo R, S. Vicente, CPV	CW
22581.5	KFS	San Francisco R, CA, USA	CW
22586.5	YLQ	Riga R, LVA	CW
22587.0	3BM 7	Port Louis R, MAU	CW
22587.5	LPD 28	General Pacheco R, ARG	CW
	OXZ 9	Lyngby R, DNK	CW
22588.5	WSC	Tuckerton R, NJ, USA	CW
22588.7	HZG	Dammam R, ARS	CW
22589.0	VHI 7	RAN Darwin, NT, AUS	CW
22589.5	SVA 7	Athens R, GRC	CW
22592.5	A9M	Hamala R, BHR	CW
22595.0	OBC	Callao R, PRU	CW
22595.7	SVB 7	Athens R, GRC	CW
22599.0	JFC	Misaki F R, J	CW
22599.5	SPH 93	Gdynia R, POL	CW
22602.5	OXZ 92	Lyngby R, DNK	CW
22603.0	PPR	Rio de Janeiro R, B	CW
22603.5	UIW	Kaliningrad R, RUS	CW
22604.5	PPL	Belem R, B	CW
22605.5	PPJ	Juncao R, B	CW
22606.5	JFG	Shizuokaken F R, J	CW
22607.3	*SAB 93*	*Goeteborg R, S*	*scheduled; QSX 22352.0 kHz*
22607.5	SPH 92	Gdynia R, POL	CW
22609.8	OFJ 22	Helsinki R, FIN	CW
22610.5	CLA 50	Habana R, CUB	CW
22611.5	HLF	Soul R, KOR	CW
22615.0		**UNID teleprinter**	**100**
22616.5	XSJ	Zhanjiang R, CHN	CW
22619.5	ESP	Pärnu R, EST	CW
22622.5	EDF 6	Madrid R, E	CW
22628.5	IAR	Rome R, I	CW
	VTG 9	IN Mumbai, IND	CW
22629.0	ZPK	Asuncion R, PRG	CW
22630.5	IAR	Rome R, I	CW
22631.0	ZLO 7	RNZN Auckland, NZL	CW
22635.0	ZPK	Asuncion R, PRG	CW
22635.5	URL	Sevastopol' R, UKR	CW
22636.5	JCT	Choshi R, J	CW
	LYL	Klaipeda R, LTU	CW
22638.5	VAI	CCG Vancouver, BC, CAN	CW
22640.0	WCC	Chatham R, MA, USA	CW
22641.0	USU	Mariupol R, UKR	CW
22642.0	JFX	Kagoshima F R, J	CW
22646.5	JOS	Nagasaki R, J	CW
22648.5	JNA	JN Tokyo, J	CW

22649.0	CLA 51	Habana R, CUB	CW	
22649.7	***SAB 93***	***Goeteborg R, S***	***scheduled; QSX 22352.0 kHz***	
22658.0	WCC	Chatham R, MA, USA	CW	
	XSV	Tianjin R, CHN	CW	
22658.8	ZLP 7	RNZN Auckland, NZL	CW	
22659.5	JOR	Nagasaki R, J	CW	
	UDK	Murmansk R, RUS	CW	
22661.0	CLS	Habana R, CUB	CW	
22668.5	PPO	Olinda R, B	CW	
22669.5	JCS	Choshi R, J	CW	
22670.5	PPR	Rio de Janeiro R, B	CW	
22674.5	PPR	Rio de Janeiro R, B	CW	
22677.5	HZG	Dammam R, ARS	CW	
22679.0	SVG 7	Athens R, GRC	CW	
22679.5	PPL	Belem R, B	CW	
22680.0	7TF 12	Boufarik R, ALG	CW	
22681.5	UIW	Kaliningrad R, RUS	CW	
22682.0	PCH 70	Scheveningen R, NLD	CW	
22684.0	**UHK**	**Batumi R, GEO**	**ITA2 50 Bd: 1234 R tts wtsca**	
			CW	
22684.5	A9M	Hamala R, BHR	CW	
22686.5	PPJ	Juncao R, B	CW	
	WLO	Mobile R, AL, USA	CW	
22688.0	FFS 59	Saint Lys R, F	CW	
22690.5	JOU	Nagasaki R, J	CW	
22691.5	PPR	Rio de Janeiro R, B	CW	
22694.0	CWA	Cerrito R, URG	CW	
	XSG	Shanghai R, CHN	CW	
	9GP	Tema R, GHA	CW	
22694.5	PPO	Olinda R, B	CW	
22695.5	JYO	Aqaba R, JOR	CW	
22696.0		coast stations, ch 2201	SSB	QSX 22000.0 kHz
	BVA	T'ai-pei R, TAI		
	EHY	Madrid R, E		
	JYO	Aqaba R, JOR		
	WOO	Ocean Gate R, NJ, USA		
	XSV	Tianjin R, CHN		
22699.0		coast stations, ch 2202	SSB	QSX 22003.0 kHz
	IAR	Rome R, I		
	S3D	Chittagong R, BGD		
	S3E	Khulna R, BGD		
	UIK	Vladivostok R, SE, RUS		
	UTT	Odessa R, UKR		
	XYR	Yangon R, MYA		
22702.0		coast stations, ch 2203	SSB	QSX 22006.0 kHz
	DZO	Bulacan R, PHL		
	HPP 20	Panama R, PNR		
	LZW 89	Varna R, BUL		
	OXZ	Lyngby R, DNK		
	SAG	Goeteborg R, S		
	VID	Darwin R, NT, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
22705.0		coast stations, ch 2204	SSB	QSX 22009.0 kHz
	FFL 92	Saint Lys R, F		
	LPL	General Pacheco R, ARG		
	OHG 2	Helsinki R, FIN		
	UBE	Petropavl.-Km. R, FE, RUS		
	ZSC 29	Cape Town R, AFS		

22705.0	4XO	Haifa R, ISR		
	9KK 24	Safat R, KWT		
22708.0		coast stations, ch 2205	SSB	QSX 22012.0 kHz
	PCG 71	Scheveningen R, NLD		
	WOO	Ocean Gate R, NJ, USA		
	7TF 49	Boufarik R, ALG		
22711.0		coast stations, ch 2206	SSB	QSX 22015.0 kHz
	A9M	Hamala R, BHR		
	GKT 76	Portishead R, G		
	OBC	Callao R, PRU		
	SPC 93	Gdynia R, POL		
	ZSC	Cape Town R, AFS		
	9AR	Rijeka R, HRV		
22714.0		coast stations, ch 2207	SSB	QSX 22018.0 kHz
	BVA	T'ai-pei R, TAI		
	CUL	Lisbon R, POR		
	DZK	Bulacan R, PHL		
	D4A	Mindelo R, S. Vicente, CPV		
	S3D	Chittagong R, BGD		
	UAT	Moscow R, RUS		
	UGE	Arkhangelsk R, RUS		
	XSG	Shanghai R, CHN		
	4XO	Haifa R, ISR		
22717.0		coast stations, ch 2208	SSB	QSX 22021.0 kHz
	HPP 20	Panama R, PNR		
	JBO	Tokyo R, J		
	LFN 32	Rogaland R, NOR		
	LZL	Bourgas R, BUL		
	LZW	Varna R, BUL		
	PZN	Paramaribo R, SUR		
22720.0		coast stations, ch 2209	SSB	QSX 22024.0 kHz
	DXF	Davao R, PHL		
	HLS	Soul R, KOR		
	OSU 74	Oostende R, BEL		
	SPC 94	Gdynia R, POL		
	SVN 71	Athens R, GRC		
	UHY	Murmansk R, RUS		
22723.0		coast stations, ch 2210	SSB	QSX 22027.0 kHz
	DZJ	Bulacan R, PHL		
	JFA	Funabashi F R, J		
	SVN 72	Athens R, GRC		
	S3E	Khulna R, BGD		
	WOO	Ocean Gate R, NJ, USA		
22726.0		coast stations, ch 2211	SSB	QSX 22030.0 kHz
	IAR	Rome R, I		
	OXZ	Lyngby R, DNK		
	SAG	Goeteborg R, S		
22729.0		coast stations, ch 2212	SSB	QSX 22033.0 kHz
	GKU 72	Portishead R, G		
	VID	Darwin R, NT, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	5BA 72	Nicosia R, CYP		
	9VG 70	Singapore R, SNG		
22732.0		coast stations, ch 2213	SSB	QSX 22036.0 kHz
	OXZ	Lyngby R, DNK		
	SAG	Goeteborg R, S		
	TAM	Mersin R, TUR		
	UFA	Batumi R, GEO		

22732.0	UFO	Kholmsk R, FE, RUS		
	5AT	Tripoli R, LBY		
22735.0		coast stations, ch 2214	SSB	QSX 22039.0 kHz
	BVA	T'ai-pei R, TAI		
	CWF	Punta Carretas R, URG		
	GKU 74	Portishead R, G		
	HEB 52	Berne R, SUI		
	KMI	Dixon R, CA, USA		
	OSU 77	Oostende R, BEL		
	S3D	Chittagong R, BGD		
	TAH	Istanbul R, TUR		
	TAM	Mersin R, TUR		
	XSQ	Guangzhou R, CHN		
22738.0		coast stations, ch 2215	SSB	QSX 22042.0 kHz
	FFL 95	Saint Lys R, F		
	LFN 35	Rogaland R, NOR		
	OBQ	Iquitos R, PRU		
	SPW 91	Warsaw R, POL		
	WOM	Miami R, FL, USA		
22741.0		coast stations, ch 2216	SSB	QSX 22045.0 kHz
	IAR	Rome R, I		
	OXZ	Lyngby R, DNK		
	WOM	Miami R, FL, USA		
	9KK 25	Safat R, KWT		
22744.0		coast stations, ch 2217	SSB	QSX 22048.0 kHz
	OBF	Mollendo R, PRU		
	SVN 73	Athens R, GRC		
	S3D	Chittagong R, BGD		
	VRX	Victoria Harbour R, HKG		
	4XO	Haifa R, ISR		
22747.0		coast stations, ch 2218	SSB	QSX 22051.0 kHz
	OXZ	Lyngby R, DNK		
	UTT	Odessa R, UKR		
	UWY	Yalta R, UKR		
	5BA 74	Nicosia R, CYP		
22750.0		coast stations, ch 2219	SSB	QSX 22054.0 kHz
	BVA	T'ai-pei R, TAI		
	CLA 77	Habana R, CUB		
	OSU 73	Oostende R, BEL		
	SPO 91	Szczecin R, POL		
	SVN 74	Athens R, GRC		
	S3D	Chittagong R, BGD		
	XSG	Shanghai R, CHN		
	3AC 22	Monte Carlo R, MCO		
22753.0		coast stations, ch 2220	SSB	QSX 22057.0 kHz
	GKU 70	Portishead R, G		
	HEB 72	Berne R, SUI		
	VAI	CCG Vancouver, BC, CAN		
	6VA	Dakar R, SEN		
22756.0		coast stations, ch 2221 (WORLDWIDE CALLING FREQ.)	SSB	QSX 22060.0 kHz
22759.0		coast stations, ch 2222	SSB	QSX 22063.0 kHz
	CUL	Lisbon R, POR		
	D4A	Mindelo R, S. Vicente, CPV		
	HZG	Dammam R, ARS		
	OHG 2	Helsinki R, FIN		
	WOM	Miami R, FL, USA		
	8Q2	Male R, MLD		
22762.0		coast stations, ch 2223	SSB	QSX 22066.0 kHz
	IAR	Rome R, I		

22762.0	KMI	Dixon R, CA, USA		
	S3D	Chittagong R, BGD		
	TAH	Istanbul R, TUR		
	TAI	Iskenderun R, TUR		
	VID	Darwin R, NT, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
22765.0		coast stations, ch 2224	SSB	QSX 22069.0 kHz
	EHY	Madrid R, E		
	SVN 75	Athens R, GRC		
22768.0		coast stations, ch 2225	SSB	QSX 22072.0 kHz
	OSU 71	Oostende R, BEL		
	TFA	Reykjavik R, ISL		
	TUA	Abidjan R, CTI		
	XDA	Mexico City R, MEX		
	XFA	Acapulco R, MEX		
	3AC	Monte Carlo R, MCO		
	7TF 50	Boufarik R, ALG		
22771.0		coast stations, ch 2226	SSB	QSX 22075.0 kHz
	BVA	T'ai-pei R, TAI		
	FFL 91	Saint Lys R, F		
	SUH	Alexandria R, EGY		
	S3E	Khulna R, BGD		
	TFA	Reykjavik R, ISL		
	XSQ	Guangzhou R, CHN		
	ZAD	Durres R, ALB		
22774.0		coast stations, ch 2227	SSB	QSX 22078.0 kHz
	ASK	Karachi R, PAK		
	DZA	Mandaluyong R, PHL		
	GKV 77	Portishead R, G		
	JBO	Tokyo R, J		
	7TF 51	Boufarik R, ALG		
22777.0		coast stations, ch 2228	SSB	QSX 22081.0 kHz
	A7D	Doha R, QAT		
	KMI	Dixon R, CA, USA		
	OXZ	Lyngby R, DNK		
	SAG	Goeteborg R, S		
	S3E	Khulna R, BGD		
	VID	Darwin R, NT, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
22780.0		coast stations, ch 2229	SSB	QSX 22084.0 kHz
	EHY	Madrid R, E		
	GKV 79	Portishead R, G		
22783.0		coast stations, ch 2230	SSB	QSX 22087.0 kHz
	SAG	Goeteborg R, S		
	VID	Darwin R, NT, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
22786.0		coast stations, ch 2231	SSB	QSX 22090.0 kHz
	ESA	Tallinn R, EST		
	FFL 94	Saint Lys R, F		
	HZG	Dammam R, ARS		
	SVN 76	Athens R, GRC		
	UDN	Novorossiysk R, RUS		
	YLQ	Riga R, LVA		
	9MG 42	Georgetown R, Pin. I., MLA		

22789.0		coast stations, ch 2232	SSB	QSX 22093.0 kHz
	CLA 76	Habana R, CUB		
	HEB 62	Berne R, SUI		
	PCG 72	Scheveningen R, NLD		
	SPW 92	Warsaw R, POL		
	YIR	Basrah R, IRQ		
22792.0		coast stations, ch 2233	SSB	QSX 22096.0 kHz
	SVN 77	Athens R, GRC		
	S3D	Chittagong R, BGD		
	YQI 71	Constanta R, ROU		
22795.0		coast stations, ch 2234	SSB	QSX 22099.0 kHz
	LFN 41	Rogaland R, NOR		
	LPL	General Pacheco R, ARG		
	PKX	Jakarta R, INS		
	XDA	Mexico City R, MEX		
	XFK	La Paz R, MEX		
	5AB	Benghazi R, LBY		
22798.0		coast stations, ch 2235	SSB	QSX 22102.0 kHz
	A7D	Doha R, QAT		
	FFL 93	Saint Lys R, F		
22801.0		coast stations, ch 2236	SSB	QSX 22105.0 kHz
	JBO	Tokyo R, J		
	KMI	Dixon R, CA, USA		
	OXZ	Lyngby R, DNK		
	WOO	Ocean Gate R, NJ, USA		
	ZLA	Awanui R, NZL		
22804.0		coast stations, ch 2237	SSB	QSX 22108.0 kHz
	IAR	Rome R, I		
	WLO	Mobile R, AL, USA		
	8Q2	Male R, MLD		
22807.0		coast stations, ch 2238	SSB	QSX 22111.0 kHz
	PPR	Rio de Janeiro R, B		
	SVN 78	Athens R, GRC		
	VID	Darwin R, NT, AUS		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	VIT	Townsville R, QLD, AUS		
	7TF 52	Boufarik R, ALG		
22810.0		coast stations, ch 2239	SSB	QSX 22114.0 kHz
	DZD	Manila R, PHL		
	LFN 44	Rogaland R, NOR		
	OSU 72	Oostende R, BEL		
	9AR	Rijeka R, HRV		
22813.0		coast stations, ch 2240	SSB	QSX 22117.0 kHz
	ASK	Karachi R, PAK		
	GKX 70	Portishead R, G		
	JBO	Tokyo R, J		
	LFN 45	Rogaland R, NOR		
	5RS	Toamasina R, MDG		
22816.0		coast stations, ch 2241	SSB	QSX 22120.0 kHz
	HKB	Barranquilla R, CLM		
	HKC	Buenaventura R, CLM		
	VRX	Victoria Harbour R, HKG		
22819.0		coast stations, ch 2242	SSB	QSX 22123.0 kHz
	HKB	Barranquilla R, CLM		
	HKC	Buenaventura R, CLM		
	WLO	Mobile R, AL, USA		
22822.0		coast stations, ch 2243	SSB	QSX 22126.0 kHz
	JNA	JN Tokyo, J		
	LZW	Varna R, BUL		

22822.0	PPR	Rio de Janeiro R, B	
	VZX	Penta R, Gosf., NSW, AUS	
22825.0		coast stations, ch 2244	SSB QSX 22129.0 kHz
	IAR	Rome R, I	
	JNA	JN Tokyo, J	
	KFS	San Francisco R, CA, USA	
22828.0		coast stations, ch 2245	SSB QSX 22132.0 kHz
	EHY	Madrid R, E	
	LSD 836	Buenos Aires R, ARG	
	WNU	Slidell R, LA, USA	
22831.0		coast stations, ch 2246	SSB QSX 22135.0 kHz
	HEB 82	Berne R, SUI	
	PPR	Rio de Janeiro R, B	
	WLO	Mobile R, AL, USA	
22834.0		coast stations, ch 2247	SSB QSX 22138.0 kHz
	KEJ	Hoolehua R, HWA	
	VCT	Tors Cove R, NFLD, CAN	
22837.0		coast stations, ch 2248	SSB QSX 22141.0 kHz
	EHY	Madrid R, E	
22840.0		coast stations, ch 2249	SSB QSX 22144.0 kHz
22843.0		coast stations, ch 2250	SSB QSX 22147.0 kHz
	PPR	Rio de Janeiro R, B	
	9AR	Rijeka R, HRV	
22846.0		coast stations, ch 2251	SSB QSX 22150.0 kHz
	PPR	Rio de Janeiro R, B	
	3AC 22	Monte Carlo R, MCO	
22849.0		coast stations, ch 2252	SSB QSX 22153.0 kHz
	YLQ	Riga R, LVA	
22850.0	*3MA 36*	*CNA T'ai-pei, TAI*	*FAX // 9430.0 kHz* CW
22852.0		coast stations, ch 2253	SSB QSX 22156.0 kHz

22855.0 - 23000.0 **FIXED** <540>

23000.0 - 23200.0 **FIXED + Mobile except aeronautical mobile (R)** <540>

23008.0	*NPN*	*USN Apra Harbour, GUM*	*FAX // 5262.0 kHz $*
23070.0		Sydney Air, NSW, AUS	SSB
23120.0		Italian E Lagos, NIG	ARQ-E 96 Bd: 1000 msgs + msg (5lgs) to Rome
23142.0	GKX	Portishead Air, G	SSB

23200.0 - 23350.0 **AERONAUTICAL FIXED + AERONAUTICAL MOBILE (OR)**

23331.0	*KVM 70*	*Honolulu Meteo, HWA*	*FAX // 9982.5 kHz $*

23350.0 - 24000.0 **FIXED + MOBILE except aeronautical mobile** <541 542>

23370.0	HZN 50	Jeddah Meteo, ARS	ITA2 100 Bd: 0610-1748 wx
23522.9	*JMH 6*	*Tokyo Meteo, J*	*FAX // 3622.5 kHz $*
23561.5	PCW 1	MFA Den Haag, NLD	SITOR-A: 0908+0925+1152+1157+1634 tfc

24000.0 - 24890.0 FIXED + LAND MOBILE <542>

24102.0	'DFZG'	MFA Belgrade, SRB	ITA2 75 Bd: 0610 encrypted msg after "XJXJXJ...", 1406 encrypted msg after "XYXYXY..."

24890.0 - 24990.0 AMATEUR + AMATEUR-SATELLITE <510 542>

24990.0 - 25005.0 STANDARD FREQUENCY AND TIME SIGNAL

25005.0 - 25010.0 STANDARD FREQUENCY AND TIME SIGNAL + Space Research

25010.0 - 25070.0 FIXED + MOBILE except aeronautical mobile

25011.0	SVB 8	Athens R, GRC	CW
25040.0	*JFA*	*Funabashi F R, J*	*scheduled*

25070.0 - 25210.0 MARITIME MOBILE

25070.0		ship stations, ch 2501	SSB	QSX 26145.0 kHz
25073.0		ship stations, ch 2502	SSB	QSX 26148.0 kHz
25076.0		ship stations, ch 2503	SSB	QSX 26151.0 kHz
25079.0		ship stations, ch 2504	SSB	QSX 26154.0 kHz
25082.0		ship stations, ch 2505	SSB	QSX 26157.0 kHz
25085.0		ship stations, ch 2506	SSB	QSX 26160.0 kHz
25088.0		ship stations, ch 2507	SSB	QSX 26163.0 kHz
25091.0		ship stations, ch 2508	SSB	QSX 26166.0 kHz
25094.0		ship stations, ch 2509	SSB	QSX 26169.0 kHz
25097.0		ship stations, ch 2510 (WORLDWIDE CALLING FREQ.)	SSB	QSX 26172.0 kHz
25100.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB	
25103.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB	
25106.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB	
25109.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB	
	GKX	Portishead Air, G	SSB	
25112.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB	
25115.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB	
25118.0	WORLDWIDE	SHIP STATIONS SIMPLEX FREQ.	SSB	
25161.5 - - 25171.0		ship stations working frequencies	CW	
25171.5		ship stations calling, ch A	CW	groups I + II
25172.0		ship stations calling, ch C	CW	common channel
25172.5		ship stations calling, ch B	CW	groups III + IV
25173.0		ship stations, channel 1	QSX 26101.0 kHz	
25173.5		ship stations, channel 2	QSX 26101.5 kHz	
25174.0		ship stations, channel 3	QSX 26102.0 kHz	
25174.5		ship stations, channel 4	QSX 26102.5 kHz	
25175.0		ship stations, channel 5	QSX 26103.0 kHz	
25175.5		ship stations, channel 6	QSX 26103.5 kHz	
25176.0		ship stations, channel 7	QSX 26104.0 kHz	
25176.5		ship stations, channel 8	QSX 26104.5 kHz	
25177.0		ship stations, channel 9	QSX 26105.0 kHz	

25177.5	ship stations, channel 10	QSX 26105.5 kHz
25178.0	ship stations, channel 11	QSX 26106.0 kHz
25178.5	ship stations, channel 12	QSX 26106.5 kHz
25179.0	ship stations, channel 13	QSX 26107.0 kHz
25179.5	ship stations, channel 14	QSX 26107.5 kHz
25180.0	ship stations, channel 15	QSX 26108.0 kHz
25180.5	ship stations, channel 16	QSX 26108.5 kHz
25181.0	ship stations, channel 17	QSX 26109.0 kHz
25181.5	ship stations, channel 18	QSX 26109.5 kHz
25182.0	ship stations, channel 19	QSX 26110.0 kHz
25182.5	ship stations, channel 20	QSX 26110.5 kHz
25183.0	ship stations, channel 21	QSX 26111.0 kHz
25183.5	ship stations, channel 22	QSX 26111.5 kHz
25184.0	ship stations, channel 23	QSX 26112.0 kHz
25184.5	ship stations, channel 24	QSX 26112.5 kHz
25185.0	ship stations, channel 25	QSX 26113.0 kHz
25185.5	ship stations, channel 26	QSX 26113.5 kHz
25186.0	ship stations, channel 27	QSX 26114.0 kHz
25186.5	ship stations, channel 28	QSX 26114.5 kHz
25187.0	ship stations, channel 29	QSX 26115.0 kHz
25187.5	ship stations, channel 30	QSX 26115.5 kHz
25188.0	ship stations, channel 31	QSX 26116.0 kHz
25188.5	ship stations, channel 32	QSX 26116.5 kHz
25189.0	ship stations, channel 33	QSX 26117.0 kHz
25189.5	ship stations, channel 34	QSX 26117.5 kHz
25190.0	ship stations, channel 35	QSX 26118.0 kHz
25190.5	ship stations, channel 36	QSX 26118.5 kHz
25191.0	ship stations, channel 37	QSX 26119.0 kHz
25191.5	ship stations, channel 38	QSX 26119.5 kHz
25192.0	ship stations, channel 39	QSX 26120.0 kHz
25192.5	ship stations, channel 40	QSX 26120.5 kHz
25193.0	ship stations, channel 1	non-paired
25193.5	ship stations, channel 2	non-paired
25194.0	ship stations, channel 3	non-paired
25194.5	ship stations, channel 4	non-paired
25195.0	ship stations, channel 5	non-paired
25195.5	ship stations, channel 6	non-paired
25196.0	ship stations, channel 7	non-paired
25196.5	ship stations, channel 8	non-paired
25197.0	ship stations, channel 9	non-paired
25197.5	ship stations, channel 10	non-paired
25198.0	ship stations, channel 11	non-paired
25198.5	ship stations, channel 12	non-paired
25199.0	ship stations, channel 13	non-paired
25199.5	ship stations, channel 14	non-paired
25200.0	ship stations, channel 15	non-paired
25200.5	ship stations, channel 16	non-paired
25201.0	ship stations, channel 17	non-paired
25201.5	ship stations, channel 18	non-paired
25202.0	ship stations, channel 19	non-paired
25202.5	ship stations, channel 20	non-paired
25203.0	ship stations, channel 21	non-paired
25203.5	ship stations, channel 22	non-paired
25204.0	ship stations, channel 23	non-paired
25204.5	ship stations, channel 24	non-paired
25205.0	ship stations, channel 25	non-paired
25205.5	ship stations, channel 26	non-paired
25206.0	ship stations, channel 27	non-paired
25206.5	ship stations, channel 28	non-paired
25207.0	ship stations, channel 29	non-paired

25207.5		ship stations, channel 30	non-paired
25208.0		ship stations, channel 31	non-paired
25208.5	WORLDWIDE	SHIP STATIONS DSC FREQUENCY	QSX 26121.0 kHz
25209.0	WORLDWIDE	SHIP STATIONS DSC FREQUENCY	
25209.5	WORLDWIDE	SHIP STATIONS DSC FREQUENCY	

25210.0 - 25550.0 FIXED + MOBILE except aeronautical mobile

25262.0	OXZ 95	Lyngby R, DNK	CW
25277.0	ZSC 41	Cape Town R, AFS	CW
25315.0	SPE 96	Szczecin R, POL	CW
25401.0	SVA 8	Athens R, GRC	CW
25431.5	SVF 8	Athens R, GRC	CW
25461.0	VIX 8	RAN Canberra, ACT, AUS	CW
25535.0	SVD 8	Athens R, GRC	CW

25550.0 - 25670.0 RADIO ASTRONOMY <545>

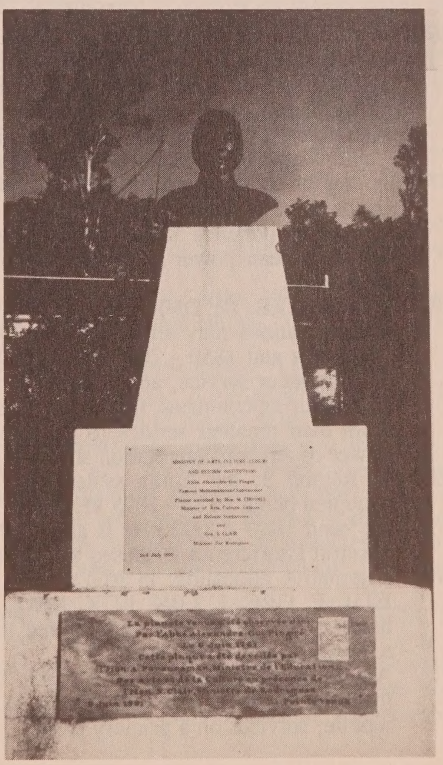
25670.0 - 26100.0 BROADCASTING

26100.0 - 26175.0 MARITIME MOBILE <520B>

26100.5	WORLDWIDE	NBDPT MSI FREQUENCY	
26101.0		coast stations, channel 1	QSX 25173.0 kHz
26101.5		coast stations, channel 2	QSX 25173.5 kHz
	OXZ	*Lyngby R, DNK*	*scheduled*
26102.0		coast stations, channel 3	QSX 25174.0 kHz
26102.5		coast stations, channel 4	QSX 25174.5 kHz
	LSD 836	*Buenos Aires R, ARG*	*scheduled*
26103.0		coast stations, channel 5	QSX 25175.0 kHz
26103.5		coast stations, channel 6	QSX 25175.5 kHz
	SAB 706	*Goeteborg R, S*	*scheduled*
26104.0		coast stations, channel 7	QSX 25176.0 kHz
26104.5		coast stations, channel 8	QSX 25176.5 kHz
26105.0		coast stations, channel 9	QSX 25177.0 kHz
	KEJ	Hoolehua R, HWA	SITOR-B: H+15 tfc list
	LZW 91	*Varna R, BUL*	*scheduled*
26105.5		coast stations, channel 10	QSX 25177.5 kHz
	WLO	*Mobile R, AL, USA*	*scheduled*
26106.0		coast stations, channel 11	QSX 25178.0 kHz
26106.5		coast stations, channel 12	QSX 25178.5 kHz
	WNU	*Slidell R, LA, USA*	*scheduled*
26107.0		coast stations, channel 13	QSX 25179.0 kHz
26107.5		coast stations, channel 14	QSX 25179.5 kHz
	KFS	*San Francisco R, CA, USA*	*scheduled*
	LSD 836	*Buenos Aires R, ARG*	*scheduled*
26108.0		coast stations, channel 15	QSX 25180.0 kHz
	USU	*Mariupol R, UKR*	*scheduled*
	WLO	*Mobile R, AL, USA*	*scheduled*
26108.5		coast stations, channel 16	QSX 25180.5 kHz
26109.0		coast stations, channel 17	QSX 25181.0 kHz
26109.5		coast stations, channel 18	QSX 25181.5 kHz
	LSD 836	*Buenos Aires R, ARG*	*scheduled*
26110.0		coast stations, channel 19	QSX 25182.0 kHz

26110.5		coast stations, channel 20	QSX 25182.5 kHz	
26111.0		coast stations, channel 21	QSX 25183.0 kHz	
26111.5		coast stations, channel 22	QSX 25183.5 kHz	
	SAB 722	*Goeteborg R, S*	*scheduled*	
26112.0		coast stations, channel 23	QSX 25184.0 kHz	
26112.5		coast stations, channel 24	QSX 25184.5 kHz	
26113.0		coast stations, channel 25	QSX 25185.0 kHz	
26113.5		coast stations, channel 26	QSX 25185.5 kHz	
26114.0		coast stations, channel 27	QSX 25186.0 kHz	
26114.5		coast stations, channel 28	QSX 25186.5 kHz	
26115.0		coast stations, channel 29	QSX 25187.0 kHz	
26115.5		coast stations, channel 30	QSX 25187.5 kHz	
	SPB 51	*Szczecin R, POL*	*scheduled*	
26116.0		coast stations, channel 31	QSX 25188.0 kHz	
26116.5		coast stations, channel 32	QSX 25188.5 kHz	
26117.0		coast stations, channel 33	QSX 25189.0 kHz	
	LZW 92	*Varna R, BUL*	*scheduled*	
26117.5		coast stations, channel 34	QSX 25189.5 kHz	
26118.0		coast stations, channel 35	QSX 25190.0 kHz	
26118.5		coast stations, channel 36	QSX 25190.5 kHz	
26119.0		coast stations, channel 37	QSX 25191.0 kHz	
	LPD	*General Pacheco R, ARG*	*scheduled*	
26119.5		coast stations, channel 38	QSX 25191.5 kHz	
26120.0		coast stations, channel 39	QSX 25192.0 kHz	
	LPD	*General Pacheco R, ARG*	*scheduled*	
26120.5		coast stations, channel 40	QSX 25192.5 kHz	
26121.0	WORLDWIDE	COAST STATIONS DSC FREQUENCY	QSX 25208.5 kHz	
26121.5	WORLDWIDE	COAST STATIONS DSC FREQUENCY		
26122.0	WORLDWIDE	COAST STATIONS DSC FREQUENCY		
26123.0	WLO	Mobile R, AL, USA	CW	
26135.0	WLO	Mobile R, AL, USA	CW	
26144.0	WLO	Mobile R, AL, USA	CW	
26145.0		coast stations, ch 2501	SSB	QSX 25070.0 kHz
	KFS	San Francisco R, CA, USA		
	OXZ	Lyngby R, DNK		
	PPR	Rio de Janeiro R, B		
	9AR	Rijeka R, HRV		
26148.0		coast stations, ch 2502	SSB	QSX 25073.0 kHz
	OXZ	Lyngby R, DNK		
	VIP	Perth R, WA, AUS		
	VIS	Sydney R, NSW, AUS		
	WNU	Slidell R, LA, USA		
26151.0		coast stations, ch 2503	SSB	QSX 25076.0 kHz
	HEB 25	Berne R, SUI		
	LSD 836	Buenos Aires R, ARG		
	LZW 94	Varna R, BUL		
	WLO	Mobile R, AL, USA		
26154.0		coast stations, ch 2504	SSB	QSX 25079.0 kHz
	KEJ	Hoolehua R, HWA		
	LSD 836	Buenos Aires R, ARG		
	PPR	Rio de Janeiro R, B		
26157.0		coast stations, ch 2505	SSB	QSX 25082.0 kHz
	PPR	Rio de Janeiro R, B		
	4XO	Haifa R, ISR		
26160.0		coast stations, ch 2506	SSB	QSX 25085.0 kHz
	IAR	Rome R, I		
	LPL	General Pacheco R, ARG		
26163.0		coast stations, ch 2507	SSB	QSX 25088.0 kHz
	EHY	Madrid R, E		
	LSD 836	Buenos Aires R, ARG		

26163.0	SVN 81	Athens R, GRC		
	VCT	Tors Cove R, NFLD, CAN		
26166.0		coast stations, ch 2508	SSB	QSX 25091.0 kHz
	CUB	Funchal R, MDR		
	CUL	Lisbon R, POR		
	PPR	Rio de Janeiro R, B		
	SVN 82	Athens R, GRC		
26169.0		coast stations, ch 2509	SSB	QSX 25094.0 kHz
	LPL	General Pacheco R, ARG		
26172.0		coast stations, ch 2510 (WORLDWIDE CALLING FREQ.)	SSB	QSX 25097.0 kHz
26175.0 - 27500.0		**FIXED + MOBILE except aeronautical mobile**	**<546>**	
26383.0	SAG	Goeteborg R, S	SSB	
27500.0 - 28000.0		**FIXED + METEOROLOGICAL AIDS + MOBILE**		
28000.0 - 29700.0		**AMATEUR + AMATEUR-SATELLITE**		
29700.0 - 30000.0		**FIXED + MOBILE** ☺ ☺ ☺		



Memorial near the meteorological station Pointe Venus near Port Mathurin, Rodrigues, Indian Ocean (see cover page). This picture was taken during our 1996 monitoring mission in Mauritius and Rodrigues. The plates read

MINISTRY OF ARTS, CULTURE, LEISURE
AND REFORM INSTITUTIONS
Abbé Alexandre-Gui Pingré
Famous Mathematician/Astronomer
Plaque unveiled by Hon. M. CHONEE,
Minister of Arts, Culture, Leisure
and Reform Institutions
and
Hon. S. CLAIR
Minister For Rodrigues

La planète Venus a été observée d'ici
par l'Abbé Alexandre-Gui Pingré
Le 6 Juin 1761
Cette plaque a été devoilée par
l'Hon. A. Parsuraman, Ministre de l'Education,
des Arts et de la Culture en présence de
l'Hon. S. Clair, Ministre de Rodrigues
9 Juin 1991 Pointe Venus

3.4 Footnotes

RR 444	Administrations authorizing the use of frequencies below 9 kHz shall ensure that no harmful interference is caused thereby to the services to which the bands above 9 kHz are allocated (see RR 1816).
RR 445	Administrations conducting scientific research using frequencies below 9 kHz are urged to advise other administrations that may be concerned in order that such research may be afforded all practicable protection from harmful interference.
RR 480	In Region 2, the use of the band 1605 - 1705 kHz by stations of the broadcasting service shall be subject to a plan to be established by a regional administrative radio conference (see Recommendation 504).
RR 480A	In the band 1605 - 1705 kHz, in cases where a broadcasting station of Region 2 is concerned, the service area of the maritime mobile stations in Region 1 shall be limited to that provided by ground-wave propagation.
RR 482	Additional allocation: in AUS, INS, NZL, PHL, SLK, SNG and THA, the band 1606.5 - 1705 kHz is also allocated to the broadcasting service on a secondary basis.
RR 483	Different category of service: in BUL, CIS, CZE, HNG, MNG, NIG, POL, SVK and TCD, the allocation of the bands 1606.5 - 1625 kHz, 1635 - 1800 kHz and 2107 - 2160 kHz to the fixed and land mobile services is on a primary basis (see RR 425).
RR 484	Some countries of Region 1 use radiodetermination systems in the bands 1606.5 - 1625 kHz, 1635 - 1800 kHz, 1850 - 2160 kHz, 2194 - 2300 kHz, 2502 - 2850 kHz and 3500 - 3800 kHz. The establishment and operation of such systems are subject to agreement, obtained under the procedure set forth in Article 14. The radiated mean power of these stations shall not exceed 50W.
RR 485	Additional allocation: in AGL, CIS, CZE, BUL, HNG, MNG, NIG, POL, SVK and TCD, the bands 1625 - 1635 kHz, 1800 - 1810 kHz and 2160 - 2170 kHz are also allocated to the fixed and land mobile services on a primary basis subject to agreement obtained under the procedure set forth in Article 14.
RR 486	In Region 1, in the bands 1625 - 1635 kHz, 1800 - 1810 kHz and 2160 - 2170 kHz (except in the countries listed in RR 485 and those listed in RR 499 for the band 2160 - 2170 kHz), existing stations in the fixed and mobile, except aeronautical mobile, services (and stations of the aeronautical mobile (OR) service in the band 2160 - 2170 kHz) may continue to operate on a primary basis until satisfactory replacement assignments have been found and implemented in accordance with Resolution 38.
RR 487	In Region 1, the establishment and operation of stations of the radiolocation service in the bands 1625 - 1635 kHz, 1800 - 1810 kHz and 2160 - 2170 kHz shall be subject to agreement obtained under the procedure set forth in Article 14 (see also RR 486). The radiated mean power of radiolocation stations shall not exceed 50 W. Pulse systems are prohibited.
RR 488	In CIS, CZE, D, DNK, FIN, G, HNG, IRL, ISR, JOR, MLT, NOR, POL, S and SVK, administrations may allocate up to 200 kHz to their amateur service in the bands 1715 - 1800 kHz and 1850 - 2000 kHz. However, when allocating the bands within this range to their amateur service, administrations shall, after prior consultation with administrations of neighbouring countries, take such steps as may be necessary to prevent harmful interference from their amateur service to the fixed and mobile services of other countries. The mean power of any amateur station shall not exceed 10 W.
RR 489	In Region 3, the Loran system operates either on 1850 kHz or 1950 kHz, the bands occupied being 1825 - 1875 kHz and 1925 - 1975 kHz respectively. Other services to which the band 1800 - 2000 kHz is allocated may use any frequency therein on condition that no harmful interference is caused to the Loran system operating on 1850 kHz or 1950 kHz.
RR 490	Alternative allocation: in AGL, AUT, BEL, BUL, CIS, CME, COG, D, DNK, EGY, E, ETH, F, GRC, I, LBN, LUX, MWI, NLD, POR, SYR, SOM, TZA, TUN and TUR, the band 1810 - 1830 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis.
RR 491	Additional allocation: in ARS, CZE, IRQ, ISR, LBY, POL, ROU, SVK, TCD and TGO, the band 1810 - 1830 kHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis.

RR 492 In Region 1, the use of the band 1810 - 1850 kHz by the amateur service is subject to the condition that satisfactory replacement assignments have been found and implemented in accordance with Resolution 38, for frequencies to all existing stations of the fixed and mobile, except aeronautical mobile, services operating in this band (except for the stations of the countries listed in RRs 490, 491 and 493). On completion of satisfactory transfer, the authorization to use the band 1810 - 1850 kHz by the amateur service in countries situated totally or partially north of 40° N shall be given only after consultation with the countries mentioned in RRs 490 and 491 to define the necessary steps to be taken to prevent harmful interference between amateur stations and stations of other services operating in accordance with RRs 490 and 491.

RR 493 Alternative allocation: in BDI and LSO, the band 1810 - 1850 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis.

RR 494 Alternative allocation: in ARG, BOL, CHL, MEX, PRG, PRU, URG and VEN, the band 1850 - 2000 kHz is allocated to the fixed, mobile except aeronautical mobile, radiolocation and radionavigation services on a primary basis.

RR 495 In Region 1, in making assignments to stations in the fixed and mobile services in the bands 1850 - 2045 kHz, 2194 - 2498 kHz, 2502 - 2625 kHz and 2650 - 2850 kHz, administrations should bear in mind the special requirements of the maritime mobile service.

RR 496 In Region 1, the use of the band 2025 - 2045 kHz by the meteorological aids service is limited to oceanographic buoy stations.

RR 497 In Region 2, except in GRL, coast stations and ship stations using radiotelephony in the band 2065 - 2107 kHz shall be limited to class R3E or J3E emissions and to a peak envelope power not exceeding 1 kW. Preferably, the following carrier frequencies should be used: 2065.0 kHz, 2079.0 kHz, 2082.5 kHz, 2086.0 kHz, 2093.0 kHz, 2096.5 kHz, 2100.0 kHz and 2103.5 kHz. In ARG, B and URG, the carrier frequencies 2068.5 kHz and 2075.5 kHz are also used for this purpose, while the frequencies within the band 2072 - 2075.5 kHz are used as provided in RR 4323BD.

RR 498 In Regions 2 and 3, provided no harmful interference is caused to the maritime mobile service, the frequencies between 2065 kHz and 2107 kHz may be used by stations of the fixed service communicating only within national borders and whose mean power does not exceed 50 W. In notifying the frequencies, the attention of the International Frequency Registration Board should be drawn to these provisions.

RR 499 Additional allocation: in ARS, BOT, ETH, IRQ, LSO, LBY, MWI, SOM, SWZ and ZMB, the band 2160 - 2170 kHz is also allocated to the fixed and mobile, except aeronautical mobile (R), services on a primary basis. The mean power of stations in these services shall not exceed 50 W.

RR 500 The carrier frequency 2182 kHz is an international distress and calling frequency for radiotelephony. The conditions for the use of the band 2173.5 - 2190.5 kHz are prescribed in Articles 37, 38, N38 and 60.

RR 500A The frequencies 2187.5 kHz, 4207.5 kHz, 6312 kHz, 8414.5 kHz, 12577 kHz and 16804.5 kHz are international distress frequencies for digital selective calling. The conditions for the use of these frequencies are prescribed in Article N38.

RR 500B The frequencies 2174.5 kHz, 4177.5 kHz, 6268 kHz, 8376.5 kHz, 12520 kHz and 16695 kHz are international distress frequencies for narrow-band direct-printing telegraphy. The conditions for the use of these frequencies are prescribed in Article N38.

RR 501 The carrier frequencies 2182 kHz, 3023 kHz, 5680 kHz, 8364 kHz and the frequencies 121.5 MHz, 156.8 MHz and 243 MHz may also be used, in accordance with the procedures in force for terrestrial radiocommunication services, for search and rescue operations concerning manned space vehicles. The conditions for the use of the frequencies are prescribed in Articles 38 and N38. The same applies to the frequencies 10003 kHz, 14993 kHz and 19993 kHz, but in each of these cases emissions must be confined in a band of plus minus 3 kHz about the frequency.

RR 502 Alternative allocation: in BEL, CYP, DNK, E, F, G, GRC, ISL, I, MLT, NOR, NLD, POR, S, SLK, SNG and TUR, the band 2194 - 2300 kHz is allocated to the maritime mobile service on a primary basis and to the fixed and land mobile services on a permitted basis.

RR 503 For the conditions for the use of the bands 2300 - 2495 kHz (2498 kHz in Region 1), 3200 - 3400 kHz, 4750 - 4995 kHz and 5005 - 5060 kHz by the broadcasting service, see RRs 406 to 411 and 2666 to 2673.

RR 504 Alternative allocation: in BEL, CYP, DNK, E, F, G, GRC, IRQ, I, MLT, NLD, NOR, POR, S and TUR, the band 2502 - 2625 kHz is allocated to the maritime mobile service on a primary basis and to the fixed and land mobile services on a permitted basis.

RR 505 The carrier (reference) frequencies 3023 kHz and 5680 kHz may also be used, in accordance with Articles 38 and N38, by stations of the maritime mobile service engaged in coordinated search and rescue operations.

RR 506 Administrations are urged to authorize the use of the band 3155 - 3195 kHz to provide a common worldwide channel for low power wireless hearing aids. Additional channels for these devices may also be assigned by administrations in the bands between 3155 kHz and 3400 kHz to suit local needs. It should be noted that frequencies in the range 3000 kHz to 4000 kHz are suitable for hearing aid devices which are designed to operate over short distances within the induction field.

RR 507 Alternative allocation: in BEL, CME, CYP, CTI, DNK, E, EGY, F, G, GRC, I, ISL, LBR, MLT, NLD, NOR, S, SLK, SNG, TGO and TUR, the band 3155 - 3200 kHz is allocated to the maritime mobile service on a primary basis and to the fixed and land mobile services on a permitted basis.

RR 508 Additional allocation: in AUS, B, CAN, J, MEX, NZL, PRU, URG and USA, the band 3230 - 3400 kHz is also allocated to the radiolocation service on a secondary basis.

RR 509 Additional allocation: in HND, MEX, PRU and VEN, the band 3500 - 3750 kHz is also allocated to the fixed and mobile services on a primary basis.

RR 510 For the use of the bands allocated to the amateur service at 3.5 MHz, 7.0 MHz, 10.1 MHz, 14.0 MHz, 18.068 MHz, 21.0 MHz, 24.89 MHz and 144 MHz in the event of natural disasters, see Resolution 640.

RR 511 Additional allocation: in B, the band 3700 - 4000 kHz is also allocated to the radiolocation service on a primary basis.

RR 512 Alternative allocation: in ARG, BOL, CHL, EQA, PRG, PRU and URG, the band 3750 - 4000 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis.

RR 513 Alternative allocation: in AFS, BOT, LSO, MWI, MOZ, NMB, SWZ, ZMB and ZWE, the band 3900 - 3950 kHz is allocated to the broadcasting service on a primary basis. The use of this band by the broadcasting service is subject to agreement obtained under the procedure set forth in Article 14 with neighbouring countries having services operating in accordance with the Table.

RR 514 Additional allocation: in CAN, the band 3950 - 4000 kHz is also allocated to the broadcasting service on a primary basis. The power of broadcasting stations operating in this band shall not exceed that necessary for a national service within the frontiers of this country and shall not cause harmful interference to other services operating in accordance with the Table.

RR 515 Additional allocation: in GRL, the band 3950 - 4000 kHz is also allocated to the broadcasting service on a primary basis. The power of the broadcasting stations operating in this band shall not exceed that necessary for a national service and shall in no case exceed 5 kW.

RR 516 In Region 3, the stations of those services to which the band 3995 - 4005 kHz is allocated may transmit standard frequency and time signals.

RR 517 The use of the band 4000 - 4063 kHz by the maritime mobile service is limited to ship stations using radiotelephony (see RR 4374 and Appendix 16).

RR 518 In AFG, ARG, AUS, BFA, BOT, CAF, CHN, CIS, IND, MLI, NGR and TCD, in the bands 4063 - 4123 kHz, 4130 - 4133 kHz and 4408 - 4438 kHz, stations of limited power in the fixed service which are situated at least 600 km from the coast may operate on condition, that harmful interference is not caused to the maritime mobile service.

RR 519 On condition that harmful interference is not caused to the maritime mobile service, the frequencies in the bands 4063 - 4123 kHz and 4130 - 4438 kHz may be used exceptionally by stations in the fixed service communicating only within the boundary of the country in which they are located with a mean power not exceeding 50 W.

RR 520 The conditions for the use of the carrier frequencies 4125 kHz and 6215.5 kHz are prescribed in Articles 37, 38, N38 and 60.

RR 520A The frequency 4209.5 kHz is used exclusively for the transmission by coast stations of meteorological and navigational warnings and urgent information to ships by means of narrow-band direct printing techniques (see Resolution 332 (MOB-87)).

RR 520B The frequencies 4210 kHz, 6314 kHz, 8416.5 kHz, 12579 kHz, 16806.5 kHz, 19680.5 kHz, 22376 kHz and 26100.5 kHz are the international frequencies for the transmission of Maritime Safety Information (MSI) (see Resolution 333 (MOB-87) and Appendix 31).

RR 521 Different category of service: in CIS, the allocation of the band 5130 - 5250 kHz to the mobile, except aeronautical mobile, service is on a primary basis (see RR 425).

RR 522 On condition that harmful interference is not caused to the maritime mobile service, the bands 6200 - 6213.5 kHz and 6220.5 - 6525 kHz may be used exceptionally by stations in the fixed service, communicating only within the boundary of the country in which they are located, with a mean power not exceeding 50 W. At the time of notification of these frequencies, the attention of the International Frequency Registration Board will be drawn to the above conditions.

RR 524 The band 6765 - 6795 kHz (centre frequency 6780 kHz) is designated for industrial, scientific and medical (ISM) applications. The use of this frequency band for ISM applications shall be subject to special authorization by the administration concerned, in agreement with other administrations whose radiocommunication services might be affected. In applying this provision, administrations shall have due regard to the latest CCIR Recommendations.

RR 525 Different category of service: in CIS and MNG, the allocation of the band 6765 - 7000 kHz to the land mobile service is on a primary basis (see RR 425).

RR 526 Additional allocation: in AGL, IRQ, KEN, RRW, SOM and TGO, the band 7000 - 7050 kHz is also allocated to the fixed service on a primary basis.

RR 527 Alternative allocation: in EGY, ETH, GUI, LBY, MDG, MWI and TZA, the band 7000 - 7050 kHz is allocated to the fixed service on a primary basis.

RR 528 The use of the band 7100 - 7300 kHz in Region 2 by the amateur service shall not impose constraints on the broadcasting service intended for use within Region 1 and Region 3.

RR 529 In Region 3, the stations of those services to which the band 7995 - 8005 kHz is allocated may transmit standard frequency and time signals.

RR 529A The conditions for the use of the carrier frequencies 8291 kHz, 12290 kHz and 16420 kHz are prescribed in Articles 38, N38 and 60.

RR 530 On condition that harmful interference is not caused to the broadcasting service, frequencies in the bands 9775 - 9900 kHz, 11650 - 11700 kHz and 11975 - 12050 kHz may be used by stations in the fixed service communicating only within the boundary of the country in which they are located, each station not using a total radiated power exceeding 24 dBW.

RR 533 In making assignments to stations of other services to which the band 13360 - 13410 kHz is allocated, administrations are urged to take all practicable steps to protect the radio astronomy service from harmful interference. Emissions from space or airborne stations can be particularly serious sources of interference to the radio astronomy service (see RRs 343 and 344 and Article 36).

RR 534 The band 13553 - 13567 kHz (centre frequency 13560 kHz) is designated for industrial, scientific and medical (ISM) applications. Radiocommunication services operating within this band must accept harmful interference which may be caused by these applications. ISM equipment operating in this band is subject to the provisions of RR 1815.

RR 535 Additional allocation: In AFG, CHN, CIS, CTI and IRN, the band 14250 - 14350 kHz is also allocated to the fixed service on a primary basis. Stations of the fixed service shall not use a radiated power exceeding 24 dBW.

RR 536 In Region 3, the stations of those services to which the band 15995 - 16005 kHz is allocated may transmit standard frequency and time signals.

RR 538 Additional allocation: in CIS, the band 18068 - 18168 kHz is also allocated to the fixed service on a primary basis for use within the boundary of CIS, with a peak envelope power not exceeding 1 kW.

RR 539 Alternative allocation: in BUL, CIS, CZE, HNG, MNG, POL and SVK, the band 21850 - 21870 kHz is allocated to the aeronautical fixed and the aeronautical mobile (R) services on a primary basis.

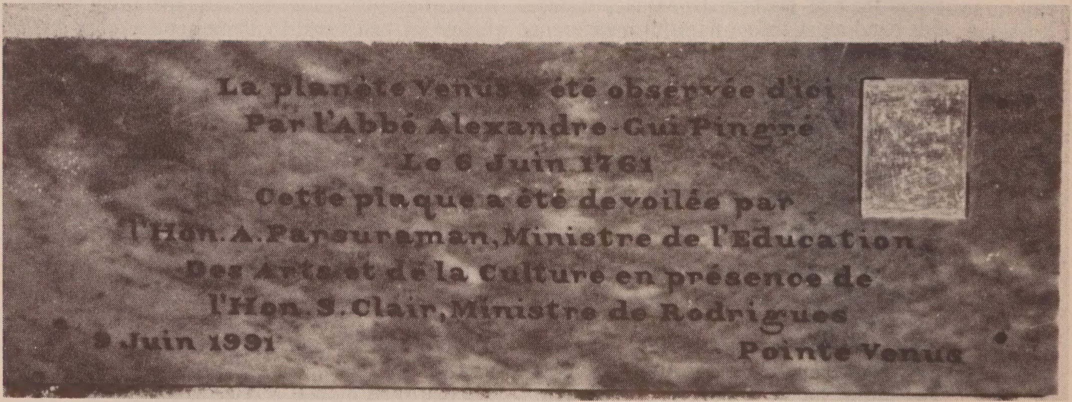
RR 540 Additional allocation: in NIG, the band 22720 - 23200 kHz is also allocated to the meteorological aids service (radiosondes) on a primary basis.

RR 541 The use of the band 23350 - 24000 kHz by the maritime mobile service is limited to inter-ship radiotelegraphy.

RR 542 Additional allocation: in KEN, the band 23600 - 24900 kHz is also allocated to the meteorological aids service (radiosondes) on a primary basis.

RR 545 The band 25550 - 25600 kHz is allocated to the fixed and land mobile, except aeronautical mobile, service on a primary basis subject to the procedure described in Resolution 8. The use of this band by the radio astronomy service shall be subject to the completion of satisfactory transfer of all assignments to stations in the fixed and mobile, except aeronautical mobile, services operating in this band and recorded in the Master Register, in accordance with the procedure described in Resolution 8. The band 25600 - 25670 kHz is allocated to the broadcasting service on a primary basis, subject to provisions to be established by the world administrative radio conference for the planning of HF bands allocated to the broadcasting service (see Resolution 508). After completion of all the above-mentioned provisions, all emissions capable of causing harmful interference to the radio astronomy service in the band 25550 - 25670 kHz shall be avoided. The use of passive sensors by other services will also be authorized.

RR 546 The band 26957 - 27283 kHz (centre frequency 27120 kHz) is designated for industrial, scientific and medical (ISM) applications. Radiocommunication services operating within this band must accept harmful interference which may be caused by these applications. ISM equipment operating in this band is subject to the provisions of RR 1815. ☺


La planète Venus a été observée d'ici
Par l'Abbé Alexandre-Gui Pingré
Le 6 Juin 1761
Cette plaque a été devoilée par
l'Hon. A. Parsuraman, Ministre de l'Education,
Des Arts et de la Culture en présence de
l'Hon. S. Clair, Ministre de Rodrigues
9 Juin 1991
Pointe Venus

Detail of the Pointe Venus memorial (see page 331)

4 Alphabetical list of utility stations

This list includes all utility stations worldwide in alphabetical country and category order. The basic telecommunication data for each country is also given. Addresses are included where known, for use with reception reports to stations monitored. More and more public utility stations offer very interesting Internet World Wide Web sites - for convenient hyperlinks see our site *http://ourworld.compuserve.com/homepages/Klingenfuss/* and our brandnew INTERNET RADIO GUIDE. Addresses of airline companies can be found in the annual JP Airline Fleets International published by Bucher, POB 44, CH-8058 Zürich, Switzerland [telefax ++41 1 8108545].

Listed are

- country name and country data;
- category;
- name of the station;
- call sign, where known (in brackets; apostrophe indicates routing indicator, or call sign not in compliance with official ITU allocations);
- frequency (-ies) in kHz;
- station address, where known.

RTTY frequencies are emphasized by **bold type**. *FAX frequencies* are accentuated by *italic type*. Frequencies carrying *both FAX and RTTY* emissions are, consequently, printed in ***bold italic type***.

Category indicators used are

AF	Air Force	MIL	Military
AIR	Aeronautical	MOI	Ministry of Interior
CG	Coast Guard	NAV	Navy
CY	Company	POL	Police, Gendarmerie
DIP	Diplomatic	PRS	Press
IP	INTERPOL	PTT	Telecommunications Authority
IRC	International Red Cross	TSF	Time Signal / Standard Frequency
MAR	Maritime	UNO	United Nations Organization
MET	Meteorological	XXX	Other

Note that many stations do not use their official call sign according to the ITU identification regulations specified in chapter 5. Notorious exceptions are

- air stations using ICAO location indicators, e.g. 'LMMM' instead of 9HA;
- diplomatic and military stations using fictive call signs, e.g. 'C37A' = MOSSAD Tel Aviv, 'G8T' = French E Belgrade;
- military stations using tactical call signs which change regularly (daily), e.g. 'AU26', 'ZH8R', etc.;
- military stations using NATO routing indicators, e.g. 'RFFP', 'UBDAD', etc.

The country data is given on the right of the country name and includes

- the corresponding ITU symbol designating countries or geographical areas (from chapter 24);
- the corresponding international call sign series (from chapter 6);
- the corresponding WMO observing station number series (from chapter 5 in our RADIO DATA CODE MANUAL);
- the corresponding ICAO location indicator series (from chapter 11 in our RADIO DATA CODE MANUAL);
- the index (plate and grid numbers) to the corresponding map in the TIMES ATLAS OF THE WORLD.

These entries are separated by strokes. Example:

"PHILIPPINES PHL / DU-DZ 4D-4I / 98000-98999 / RP / 19L4" means

"Philippines

• ITU symbol designating the country or geographical area	PHL
• international call sign series	DU - DZ, 4D - 4I
• WMO observing station number series	98000 - 98999
• ICAO location indicator series	RP
• Times Atlas map index	plate 19 grid L4"

The index refers to the Ninth Comprehensive Edition 1992 of the Times Atlas of the World (ISBN 0-7230-0492-7), which is the finest atlas in the world and thus a standard reference for the serious radio monitor. It covers 122 maps of the size 55 × 42 cm plus an index with more than 200000 place names complete with geographical coordinates.

Note that our index is completely different from that used in the Times Atlas itself. As a matter of principle, the Times index - as far as states are concerned - indicates only a small-scale map covering a complete continent or region, e.g. Europe on plate 49. Contrary hereto, the Klingenfuss index indicates that large-scale map on which the entire territory of the state is shown. For example, the Solomon Islands are not indexed to the 1 : 55 M plate 9 covering an area from Greenland over Asia and Australia to the Antarctic where they appear infinitely small, but to the 1 : 5 M plate 15 where they can be found in full size.

AFGHANISTAN AFG / T6 YA / 40900-40999 / OA / 31B4

AIR	Kabul Air = General Administration of Civil Aviation; Directorate General of ATS/COM; Ansari Watt; POB 165; KABUL
XXX	TALEBAN Jalalabad **14365.7**
XXX	TALEBAN Kabul **14365.7**

ALASKA ALS / see United States of America / 70000-70999 / PA PF PO PT / 113

AF	USAF Elmendorf AFB, Anchorage (AKA) 4724 6712 6715 6730 6739 11244 13200 13244 15016 17976 = USAF Elmendorf AFB; 1930 CS/DOJA; ELMENDORF AFB, AK 99506
AIR	Anchorage Air = Department of Transportation; Federal Aviation Administration; International Flight Service Station; Anchorage Airadio; 2016 East Fifth Avenue; ANCHORAGE, AK 99501
CG	USCG Station Adak/NOX; Box 47; FPO SEATTLE, WA 98777; USA
CG	USCG Kodiak (NOJ) **4213.5** *4298* **6317.5 6501** *8459* **11202 16806.5** = US Coast Guard Communication Station NOJ; POB 190017; KODIAK, AK 99619-0017 [*http://www.dot.gov/dotinfo/uscg/pacarea/camspac/NOJfaxsked.html*]
NAV	USN Adak (NUD) *8494*

ALBANIA ALB / ZA / 13600-13699 / LA / 82D3

MAR	Durres R (ZAD) 2282 2400 2730 4286.4 4302 4350.4 4360 6392.4 8446.4 8731 13039.3 13092 16928.4 17356 22771
MAR	Sarande R (ZAS) 2282 2400 4286.4
MAR	Shengjin R (ZAC) 2282 2400 4286.4
MAR	Vlore R (ZAV) 2282 2400 4286.4 4372

ALGERIA ALG / 7R 7T-7Y / 60350-60699 / DA / 88L7

AIR	El Djaza'ir Air = Etablissement National pour l'Exploitation Meteorologique et Aeronautique; Service de l'Information Aeronautique; Le Chef du Departement S.I.A.; U.E.N.A.; Route de Siddi Moussa Baraki; BP 653; EL DJAZA'IR/Gare

AIR	Ghardaia Air 7938
AIR	In Amenas Air 7938
AIR	Touggourt Air 7938
DIP	Egyptian E El Djaza'ir 7931.7 9241.7 9331.7 18316.7
DIP	French E El Djaza'ir ('H6L') 11052
DIP	Hungarian E El Djaza'ir (HGX 55) 14840.8 15676.2
DIP	MFA El Djaza'ir (7RQ 20) 7350.7 8010.7 9118.5 10127 10702.5 12108.5 12257 13428.4 13936.5 16274 16279 16318.5 18757.3 = Ministere des Affaires Etrangeres; 6 Rue Claude Bernard; EL DJAZA'IR
DIP	Pakistan E El Djaza'ir 19031.7
DIP	Polish E El Djaza'ir 14734
DIP	Swedish E El Djaza'ir (SAM 31) 18688
DIP	Swiss E El Djaza'ir (HBD 51) 10963
MAR	Annaba R (7TB) 1911 2775
MAR	Boufarik R (7TF/7TK) 4252 4282.3 4288 4309 4341.6 4384 4393 4426 4432 6316.5 6387.4 6415 6443.5 6501 6507 6513 8421.5 8648.5 8651.5 8698 8705.4 8722 8743 8755 8791 12658 12662 12695.5 12771 13008.8 13071.3 13095 13119 13125 13170 16932 17106 17139.5 17148.5 17217.4 17326 17332 17347 17362 22488.5 22498.5 22543 22680 22708 22768 22774 22807 = (reception reports to Ministere des Postes et Telecommunications; Centre Radiomaritime; BOUFARIK)
MAR	El Djaza'ir R (7TA) 1792 2691 2775 6402.6 8452
MAR	Oran R (7TO) 1735 2586 2719
MET	Bechar Meteo (7XR 31) 9231
MET	Djanet Meteo (7XR 37) 6941 9231
MET	El Djaza'ir Meteo (7XR 20) 9231
MET	El Golea Meteo (7XR 44) 6941
MET	Ghardaia Meteo (7XR 54) 9231 = Office National de la Meteorologie; Station Meteorologique de Ghardaia; BP 61; GHARDAIA 47010
MET	In Amenas Meteo (7XR 62) 9231
MET	In Salah Meteo (7XR 70) 6941 9231
MET	Tamanrasset Meteo (7XR 85) 9231
MET	Tebessa Meteo (7XR ..) 9231
MOI	Djanet Prefecture 13936.5
MOI	El Oued Prefecture 6800
MOI	Laghouat Prefecture 6991.4 13853.7
MOI	Medea Prefecture 4757
MOI	MOI El Djaza'ir ('KARIM') 10340 10650
MOI	Oum Theboul Prefecture 7421.4
MOI	Ouargla Prefecture 7528.4 10464.7
MOI	Souk Ahras Prefecture 7418.7
MOI	Tamanrasset Prefecture 11251.4 13936.5

AMSTERDAM AND SAINT PAUL

AMS / see France / 61996 / - / 26N14

MAR	Martin de Vivies R (FJY 4) 2506 4287 4387 8690 8791 12722 = (reception reports to DTRE Martin de Vivies)
PTT	DTRE Martin de Vivies (FJY 4) 11551.7 20113 = Le Chef Radio et le Gerant Postal; MARTIN DE VIVIES

ANDORRA

AND / C3 / - / - / 72G10

ANGOLA

AGL / D2-D3 / 66100-66499 / FN / 91D9

AIR	Luanda Air = Direccao Nacional de Aviacao Civil; Rua D. Miguel de Melo 92-6; CP 569; LUANDA
CY	ENDIAMA Lobito 10505.3

DIP	Cuban E Luanda (CLP 45) **20978.5**
DIP	Swedish E Luanda (SAM 89) **17416.9**
IRC	ICRC Luanda **18066.5**
MAR	Luanda R (D3E) 2601 4393 6369 8565 8694 8722 12780 13023 13083 17189.6 17344 = (reception reports to EPTEL Luanda)
PTT	EPTEL Luanda = Empresa Publica de Telecomunicacoes; CP 625; LUANDA

ANGUILLA

AIA / see United Kingdom / 78846-78849 / TO / 116N5

ANTARCTIC

ATA / see respective states / 88963-88970 89000-89999 / AFDU NZCM / 123

MET	Casey Meteo (VLM) *7470 11455* = (reception reports to Melbourne Meteo, Australia)
NAV	USN MARS McMurdo Sound (NNN 0ICE) 13826
NAV	USN McMurdo Sound (NGD) 4770 7995 8998 9907 10639 11553
NAV	USN Palmer Station (NHG) 11553
NAV	USN South Pole Station (NPX) 7995 10639
PTT	DTRE Dumont d'Urville (FJY 3) **9269.7 11576.7**
PTT	TELSTRA Casey (VNJ) 5401 6850
PTT	TELSTRA Davis (VLZ) 5401 6850
PTT	TELSTRA Mawson (VLZ) 5401 6850
XXX	ANI Patriot Hills 11228 15026
XXX	BAS Rothera (ZHF 45) 9106
XXX	BAS Signy, Coronation Island (ZHF 33) 9106
XXX	Scott Base (ZLQ) 11570

ANTIGUA AND BARBUDA

ATG / V2 / 78860-78864 / TA / 116o6

AF	USAF Cedar Grove (AFE 86) 10780
AIR	Saint John's Air = Directorate of Civil Aviation of Eastern Caribbean States; POB 1130; SAINT JOHN'S

ARGENTINA

ARG / AY-AZ LO-LW L2-L9 / 87000-87999 / SA / 117G4

AF	many AAF stations 18003
AIR	AA Buenos Aires 9013
AIR	Buenos Aires Air = Fuerza Aerea Argentina; Region Aerea Centro; Jefe del Departamento Comunicaciones Aeronauticas; 1804 EZEIZA
CG	ACG Bahia Blanca (L2N) 4351 4354
CG	ACG Buenos Aires = Prefectura Naval; Departamento Comunicaciones; Edificio Guardacostas; Avenida Madero 235; 1106 BUENOS AIRES (L2C) 4304 8447 12728 16925.6 (L2E) 4239.5 8528 12901 (L2F) 2065
CG	ACG Comodoro Rivadavia (L2W) 4304 8447 (L2Z) 4239.5 (L3A) 2065 4351
CG	ACG Mar del Plata (L2T) 2065 4354
CG	ACG Puerto Deseado (L4N) 2065
CG	ACG Quequen (L5B) 2065
CG	ACG Rio de la Plata (L3V) 2065
CG	ACG Rio Grande (L4F) 2065
CG	ACG San Julian (L4M) 2065
CG	ACG Ushuaia (L3O) 2065

MAR	Bahia Blanca R (LPW) 2079 4378 4399 6501 8740 8758 13113 = Bahia Blanca Radio; Avenida General Avias 2300; 8000 BAHIA BLANCA
MAR	Buenos Aires R (LSD 836) 4360 4402 **6316** 6522 **8418** 8716 8728 **12581** **13179** **13194** **16808.5** 17374 17389 19773 19797 22828 26151 26154 26163 = Argentina Radio; Jefe de Estacion; Arzobispo Espinosa 1045; 1165 BUENOS AIRES [telefax + +54 1 3858003]
MAR	Comodoro Rivadavia R (LPX) 2082.5 4363 4372 4426 6519 8746 8764 8776 13140 = RN3 km 1852; 9000 COMODORO RIVADAVIA
MAR	General Pacheco R (LPD/LPL) 2086 2100 **4218** 4262 4268 4387 4393 4432 6404 6507 **8434.5** 8514 8646 8734 8749 8797 **12647** 12763.5 12988.5 13089 13161 16824.5 17045.6 17195.5 17242 17248 19782 19788 **22394.5** 22513.5 22587.5 22705 22795 26160 26169 = (reception reports to Seccion Planta Receptora Don Bosco; Jefe Seccion; Lomas de Zamora 252; 1876 DON BOSCO)
MAR	Mar del Plata R (LPM) 2093 4405 8722 8785 13170 = Mar del Plata Radio; Avenida Luro 2460, 8 piso; 7600 MAR DEL PLATA
MAR	Rio Gallegos R (LPG) 2103.5 4375 4384 4408 8752 8770 8791 13098 17293 = Rio Gallegos Radio; Constituyentes y Mosconi; 9400 RIO GRANDE
MET	Buenos Aires Meteo (LR) *10720 18621.5* = Ministerio de Defensa; Fuerza Aerea Argentina; Servicio Meteorologico Nacional; Central Comunicaciones "ACC"; 25 de Mayo 658; 1002 BUENOS AIRES [telefax + +54 1 3123968]
NAV	AN Buenos Aires (LOL) **10516**
NAV	AN Puerto Belgrano (LOR) **8303.5 12704.5** = Armada Argentina; Base Naval; Jefe Estacion Principal; 8111 PUERTO BELGRANO
TSF	AN Buenos Aires TS (LOL) 5000 10000 15000 = Armada Argentina; Observatorio Naval; Servicio de Frecuencias Patrones de LOL; Jefe del Observatorio Naval; Avenida Espana 2099; 1107 BUENOS AIRES
TSF	Buenos Aires TS (LQ) 8168 17551.5 = Instituto Geografico Militar; Servicio Internacional de la Hora; Seccion Conservacion de la Hora; Jefe de Seccion; Calle 38 Gral. Nicolas M. Savio 865; Villa Maipu; 1650 SAN MARTIN

ARMENIA ARM / EK / 37600-37999 / UG / 44F7

ARUBA ABW / P4 / 78980-78984 / TNCA / 116A1

ASCENSION ASC / see United Kingdom / 61902 / FH / 96B12

AF	RAF Wideawake 4742 6739 9031 11234 11247
AF	USAF Wideawake (AFE 83) 6730 8964 8968 10780 11226 11634 13203 13244 14615 15016 18018
MAR	Georgetown R (ZBI) 2755 8737

AUSTRALIA AUS / AX VH-VN VZ / 94100-95499 95511-95999 / Y / 10

AF	RAAF Brisbane, QLD (AXX) 8974
AF	RAAF Darwin, NT (AXI) 3032 8974 8977 11236 13206 15016 18018 = RAAF Base; 20 Denowen Street; DARWIN 5789
AF	RAAF East Sale, VIC (AXK) 6760 8965
AF	RAAF Laverton, VIC (AXD) 14847
AF	RAAF Perth, WA (AXJ) 3032 5687 6757 8974 8977 9023 11187.5 11236 11267
AF	RAAF Richmond, NSW (AXR) 8977 9023
AF	RAAF Sydney, NSW (AXF) 3032 5687 8974 8977 8989 9007 9023 11236 11250 13206 15016
AF	RAAF Townsville, QLD (AXH) 3032 5687 8974 8977 9007 11236 13206 18018

AIR	Darwin Air, NT (reception reports to Flight Service Centre; Civil Aviation Authority; POB 42594; CASUARINA 0811)
AIR	Perth Air, WA (reception reports to Department of Aviation; The Deputy Secretary (Air); GPOB 1839-Q; MELBOURNE 3001)
AIR	Sydney Air, NSW 5160 8140 9040 11132 17440 20160 23070 = (reception reports to Department of Air Transport; Sydney Kingsford-Smith Airport; Flight Service Centre; Flight Information Supervisor; POB 211; MASCOT 2020)
CG	many ACG stations (VH2 ...) 2524
CY	RFDS Alice Springs, NT (VJD) 2020 5340 5370 5410 6950 8035
CY	RFDS Broken Hill, NSW (VJC) 2020 4055 6920 8150
CY	RFDS Cairns, QLD (VJN) 2020 2260 4045 4926 5145 5300 5865 6785 6799 7357 7465 11015
CY	RFDS Carnarvon, WA (VJT) 2280 4045 4926 5230 6890
CY	RFDS Charleville, QLD (VJJ) 2020 4045 4980 5227 6845 6945 8045
CY	RFDS Darwin, NT (VJY) 2360 4010 6840 7975
CY	RFDS Derby, WA (VJB) 2792 5300 5850 6925 6945
CY	RFDS Kalgoorlie, WA (VJQ) 2656 5010 5360 6825 8144
CY	RFDS Katherine, NT (VZ8SK) 4860 5731 7340 8014
CY	RFDS Meekatharra, WA (VJK) 2280 4010 4880 5260 6880
CY	RFDS Mount Isa, QLD (VJI) 2020 4800 4935 5110 5445 6965 7392 7501 7803
CY	RFDS Port Augusta, SA (VNZ) 2020 4010 5145 5845 6890 8165 = Royal Flying Doctor Service; 4 Vincent Street; PORT AUGUSTA 5700 [telefax ++61 86 410461]
CY	RFDS Port Hedland, WA (VKL) 2280 4030 5445 6960 7445
CY	SDE Charleville, QLD (VLH) 7792
CY	SDE Katherine, NT (VZ8SK) 11585
MAR	Brisbane R, QLD (VIB) 2056 2201 4366 4369 4390 4399 4405 4411 4426 4435 6507 6519 8707 8722 8734 8749 8761 8767 8782 8803 13083 13152 13155 13161 13167 17245 17251 17269 17275 17305 = TELSTRA Brisbane Radio VIB; 881-891 Bribie Island Road; NINGI 4511 [telefax ++61 74 975354]
MAR	Darwin R, NT (VID) 2056 2201 4366 4369 4390 4399 4405 4411 4426 4435 6507 6519 8176 8707 8722 8734 8749 8761 8767 8782 8803 12365 13083 13152 13155 13161 13167 17245 17251 17269 17275 17305 22702 22729 22762 22777 22783 22807 = TELSTRA; Darwin Radio VID; 16 Gregory Street; PARAP 0820 [telefax ++61 8 815018]
MAR	Melbourne R, VIC, AUS (VIM) 2056 2201 4366 4369 4390 4399 4405 4411 4426 4435 6507 6519 8176 8707 8722 8734 8737 8749 8761 8767 8782 8788 8803 12365 13083 13152 13155 13161 13167 17245 17251 17269 17275 17305 = TELSTRA Melbourne Radio VIM; Boneo Road; CAPE SCHANCK 3939 [telefax ++61 59 886555]
MAR	Penta R, Gosford, NSW (VZX) 2524 4354 4483 6522 8713 13176 17365 22822
MAR	Perth R, WA (VIP) 2056 2201 4213 4366 4369 4390 4399 4405 4411 4426 4435 6507 6519 8176 8419 8707 8722 8734 8749 8761 8767 8782 8803 12365 12582 12584 13083 13152 13155 13161 13167 16809.5 16811.5 17245 17251 17269 17275 17305 22702 22729 22762 22777 22783 22807 26148 = TELSTRA; Perth Radio VIP; 620 Gnangara Road; POB 1115; LANDSDALE 6065 [telefax ++61 9 3448003]
MAR	Sydney R, NSW (VIS) 2056 2201 4366 4369 4390 4399 4405 4411 4426 4435 6507 6519 8176 8707 8722 8734 8749 8761 8767 8782 8803 12365 13083 13152 13155 13161 13167 17245 17251 17269 17275 17305 22702 22729 22762 22777 22783 22807 26148 = TELSTRA Sydney Radio VIS; Jennifer Street; LA PEROUSE 2036 [telefax ++61 2 3113455]
MAR	Townsville R, QLD (VIT) 2056 2201 4366 4369 4390 4399 4405 4411 4426 4435 6507 6519 8176 8707 8722 8734 8749 8761 8767 8782 8803 12365 13083 13152 13155 13161 13167 17245 17251 17269 17275 17305 22702 22729 22762 22777 22783 22807 26148 = TELSTRA Townsville Radio VIT; 19-23 Wackett Street; PALLARENDA 4810 [telefax ++61 77 741311]

MET Darwin Meteo, NT (AXI) *5755 7535 10555 15615 18060* = Bureau of Meteorology; Northern Territory Regional Office; Regional Director; 79-81 Smith Street; GPOB 735; DARWIN 5794 [telefax + +61 89 410395]

MET Melbourne Meteo, VIC (AXM) *2628 5100 11030 13920 20469* = Bureau of Meteorology; Head Office; 150 Lonsdale Street; GPOB 1289K; MELBOURNE 3001 [telefax + +61 3 96621222 or 96621223]

NAV RAN Canberra, ACT = NAVCOMMSTA Canberra; HMAS Harman; CPORS Operations; Officer in Charge; CANBERRA 2600
(VHC) **10815 10865.5 12065 12127.5 14455 17002.4 17118.5 18315**
(VIX) 4286 6428.5 8478 12907.5 16918.8 22485 25461

NAV RAN Darwin, NT (VHI) 4316 6393 8512 12750 17084 22589 = HMAS Coonawarra; P. Mailbag 13; DARWIN 5790

NAV many RAN stations 2768 4375 6510 8122 9014 13116 17344

NAV USN Exmouth, WA (NWC) 18009 = (reception reports to NAVCOMMSTA Harold E. Holt; HMAS HARMAN; Officer in Charge; CANBERRA 2600)

POL Adelaide Police, SA (VKA) 5180 7800

POL Alice Springs Police, NT 7800

POL Hobart Police, TAS (VKT) 5915

POL Melbourne Police, VIC (VKC) 5915

PTT TELSTRA Hobart, TAS (VNM) 5401 6850

PTT TELSTRA Sydney, NSW = Telecom Australia; Managing Director; 32 - 36 Martin Place; GPOB 7000; SYDNEY 2001

TSF Sydney TS, NSW (VNG) 2500 5000 8638 12984 16000

XXX many Customs stations 7960 10435

AUSTRIA

AUT / OE / 11000-11399 / LO / 65

AIR Vienna Air = Bundesamt für Zivilluftfahrt; Aeronautical Information Service; Schnirchgasse 11; A-1030 VIENNA

DIP Algerian E Vienna **10997**

DIP Bulgarian E Vienna **10242**

DIP Egyptian E Vienna **12285.7**

DIP MFA Vienna (OEC) **5070.5 7893.5 9399 10422.5 14478.5 14518 14710** = (reception reports to PTT Vienna)

DIP Polish E Vienna **4623 6937 7934 16110**

DIP Romanian E Vienna **8075**

DIP Swiss E Vienna (HBD 57) **7659**

PTT PTT Vienna = Radio-Austria AG; Wiedner Hauptstr. 73; A-1043 VIENNA

AZERBAIJAN

AZE / 4J-4K / 37500-37999 / UB / 44H7

CY AIOC Azeri Oilfield **10676.5**

CY AIOC Baku **10676.5**

CY AIOC Günazli Oilfield **10676.5**

MAR Baku R
(UBJ) **2098.8 4369 17338**
(UON) **4277 4307 6400 6420 8500 12844.5 16851**

AZORES

AZR / see Portugal / 08500-08515 / see Portugal / 96S4

AF PAF/USAF Lajes AFB (CUW) 4721 4745 5710 6712 6739 8964 8968 9023 11226 13200 13244 15016 = (reception reports to USAF Communications Station CUW; Department of the Air Force; 1936 Communications Squadron; Operations NCO TCF; APO NEW YORK, NY 09406; USA)

AIR Santa Maria Air (CSY) **5473.5 9994 10539.1 11192 14497.5** = Aeroportos e Navegacao Aerea EP; Direccao Regional do Atlantico; Chief Aeronautical Radio; Aeropuerto de Santa Maria; P-9580 VILA DO PORTO

MAR	Horta R, Faial 1725 2741 2750 4435
MAR	Ponta Delgada R (CUG) 1725 2741 2750 4435 19761 = (reception reports to CPRM Ponta Delgada)
NAV	PN Horta (CTH) 2657 = Estacao Radionaval; P-9900 HORTA
NAV	PN Ponta Delgada ('RPTI') **5015 11153 13478**
PTT	CPRM Ponta Delgada = Companhia Portuguesa Radio Marconi; O Garante em Ponta Delgada; Rua do Acoreano Oriental 39-A; P-9500 PONTA DELGADA

BAHAMAS

BAH / C6 / 78050-78149 / MY / 116F2

AIR	Nassau Air = Director of Civil Aviation; POB 975; International Airport; NASSAU, N.P.
MAR	Nassau R (C6N) 2522 2558 6376 8441 12752 = (reception reports to BTC Nassau)
MAR	Marsh Harbour R (C6X) 2582
PTT	BTC Nassau = Bahamas Telecommunications Corporation; General Manager; POB N-3048; NASSAU, N.P.

BAHRAIN

BHR / A9 / 41150-41159 / OB / 33K10

AIR	Manama Air = Civil Aviation Directorate; Bahrain International Airport; POB 586; MANAMA
MAR	Hamala R (A9M) 2607 2656 3745 4284 4302 4393 **8427.5** 8448 8454 8719 8734 **12594.5** 12698 12709 13101 **16811.5** 17169 17175.2 17293 **22399** 22592.5 22684.5 22711 = (reception reports to BATELCO Manama)
PRS	GNA Manama (A9M) **4042 9196.6 14764** = Gulf News Agency; English Section; POB 301; MANAMA
PTT	BATELCO Manama = Bahrain Telecommunications Company; Maritime Operating Centre; Administrative Supervisor; POB 14; MANAMA

BANGLA DESH

BGD / S2-S3 / 41850-41999 / VG / 28G4

AIR	Dhaka Air = Civil Aviation Authority; Communications Division; Assistant Director; Kurmitola; DHAKA 6
DIP	Pakistan E Dhaka **18011.7**
MAR	Chittagong R (S3D) 2140 4360 4366 4387 4402 6501 6504 6507 8694 8719 8734 8746 8797 13056 13080 13089 13098 13143 13164 17248 17290 17305 17323 17335 22699 22714 22735 22744 22750 22762 22792 = (reception reports to BTTB Dhaka)
MAR	Khulna R (S3E) 2140 4231 4393 4402 6504 6510 6513 8658 8767 8782 8803 13024 13128 13134 13152 17257 17311 17344 22699 22723 22771 22777 = (reception reports to BTTB Dhaka)
PTT	BTTB Dhaka = Bangla Desh Telegraph and Telephone Board; Telejogajog Bhaban; 36/1 Mymensing Road; DHAKA 27
UNO	UNO Cox's Bazar **14643.7**

BARBADOS

BRB / 8P / 78954-78955 / TB / 116P6

AIR	Ministry of International Transport; Air Traffic Services Building; Technical Director; Grantley Adams International Airport; CHRIST CHURCH
MAR	Bridgetown R (8PO) 2582 2723 4375 6379.5 8449.3 8764 8791 12709 13113 16947.6 17359 = (reception reports to BEXTEL Bridgetown)
PTT	BEXTEL Bridgetown = Barbados External Telecommunications Ltd; Telecommunications Services; Manager; POB 32; BRIDGETOWN

BELARUS

BLR / EU-EW / 26500-26999 33000-33199 / UMA-UMI UMM / 46F3

DIP	Polish E Mensk **4962**
MET	Mensk Meteo (RST) *3810*

BELGIUM

BEL / ON-OT / 06400-06499 / EB / 61

AIR	Brussels Air = Regie des Voies Aeriennes; Service SV/ATS; Aeroport de Bruxelles - National; B-1930 ZAVENTEM
DIP	Algerian E Brussels **10997**
DIP	Italian E Brussels **13446.5**
DIP	MFA Brussels **11105 14476.1**
DIP	Polish E Brussels **8148 9198**
DIP	Romanian E Brussels **7821**
DIP	Turkish E Brussels **10433**
MAR	Oostende R (OST/OSU) 1665 1683 1689 1725 1728 1817 1820 1901 1904 1905 1908 2087 2253 2256 2373 2376 2481 2484 2758 2761 2814 **2815.5** 2817 3629 3632 3652 3655 3681 3684 **4218** 4378 4387 4405 4420 4429 **5376.5 6322** 6504 **7776.5 8435.5** 8725 8731 8734 8752 8755 8761 8803 **12639.5** 13095 13113 13119 13128 13131 16883 17266 17278 17314 17320 17329 **19698 22443** 22720 22735 22750 22768 22810 = Gewest van de Maritieme Diensten; Perronstraat 6; B-8400 OOSTENDE
MIL	BA Brussels ('RQFNC') 10233

BELIZE

BLZ / V3 / 78575-78599 / MZ / 115P9

AF	RAF Stanley Field (MUL) 11205
AIR	Belize City Air = The Chief Civil Aviation Officer; Belize International Airport; POB 367; BELIZE CITY

BENIN

BEN / TY / 65300-65349 / DB / 89L8

AIR	ASECNA Cotonou (TYE) **5222 7524** = Representation de l'ASECNA; BP 96; COTONOU
DIP	German E Cotonou **13893.5**
MAR	Cotonou R (TYA) 1813 2320 2586 6383 = (reception reports to PTT Cotonou)
PTT	PTT Cotonou = Office des Postes et Telecommunications; Directeur General; COTONOU

BERMUDA

BER / see United Kingdom / 78000-78019 / TX / 96A1

AIR	Saint George's Air = Department of Civil Aviation; Ferry Reach; SAINT GEORGE'S 1-15

BHUTAN

BHU / A5 / - / VQ / 28G2

AIR	Thimphu Air = Ministry of Communications and Tourism; Department of Civil Aviation; POB 209; THIMPHU

BOLIVIA

BOL / CP / 85000-85399 / SL / 120E7

AIR	La Paz Air = AASANA; Administracion de Aeropuertos y Servicios Auxiliares a la Navegacion Aerea; Avenida Montes 716; Casilla 4382; LA PAZ

AIR	Santa Cruz Air = AASANA; Administracion de Aeropuertos y Servicios Auxiliares a la Navegacion Aerea; Aeropuerto Internacional de Viru-Viru; Jefe Centro Regional Operaciones; Casilla 1449; SANTA CRUZ

BOSNIA AND HERZEGOVINA BIH / T9 / 14500-14699 / LQ / 81D6

AF	IAF IFOR Sarajevo 6748
AF	IAF Sarajevo 13220
DIP	Egyptian E Sarajevo 13016.7
DIP	Turkish E Sarajevo 10433
IRC	ICRC Banja Luka ('RC2BAL') 3803.6 5144 5149 5159 5164 5169 6996 = International Committee of the Red Cross; Milana Tepica 4; 78000 BANJA LUKA [telefax ++381 78 12360 and ++381 78 42391]
IRC	ICRC Bihac ('RC2BIH') 5144 5154 5159 5164 6996
IRC	ICRC Bijeljina ('RC2BIJ') 3803.6 5144 5149 5154 5159 5164 5169
IRC	ICRC Gorazde ('RC2GOR') 5164
IRC	ICRC Kladanj ('RC2KLA') 5154
IRC	ICRC Mostar ('RC2MOT) 5154 5159 5164 5169 6996
IRC	ICRC Pale ('RC2PAL') 2651.5 3801.6 3802 5144 5154 5159 5164 5169 6997.4
IRC	ICRC Sarajevo ('RC2SAR') 2651.5 3801.6 3802 3818 5144 5149 5154 5159 5164 5169 6996 6997.4 10283
IRC	ICRC Trebinje ('RC2TRE') 5154 5164
IRC	ICRC Tuzla ('RC2TUZ') 3818 5144 5149 5154 5159 5164 5169 6996
IRC	ICRC Zenica ('RC2ZEN') 3818 5144 5154 5159 5164 5169 6996 6997.4
MIL	BGS Mostar 10219.2
MIL	FA IFOR Sarajevo ('49') 5070.8
MIL	FF Sarajevo ('RFFVAY') 4707.2 4991.7 10962.2 10991.7 ('RFFXQA') 9363.5 10216 10480 11003
MIL	MA IFOR Gorazde 4168
MIL	MA IFOR Mostar 4168
MIL	MA IFOR Sarajevo 4413 5605
MIL	many NATO stations 3191 4039 4547 4930.5 5110 5310 7904
MIL	PA IFOR Sarajevo 18885
MOI	MOI Sarajevo 5784
POL	BGS Mostar 10219.2
POL	Bihac Police 4861.7
POL	Tuzla Police 4013
UNO	UNO Banja Luka ('HCBSNBA') 4090 4615 4854 5754.2 6475
UNO	UNO Bihac ('HCBSNBI') 4090 4854 5752.5 5754.2 6475
UNO	UNO Bosanski Krupa ('HCBSNBK') 4090
UNO	UNO Brcko 6475
UNO	UNO Gorazde ('HCBG') 4615 6475
UNO	UNO Medna ('HCBSNME') 6475
UNO	UNO Mostar ('HCBSNMO') 4615 6475
UNO	UNO Pale ('HCBSNPA') 4090 4615 4854 6475
UNO	UNO Sarajevo ('HCBSNSA') 4090 4854 4923 5084 5752.5 6475 6932.5 8031 9004
UNO	UNO Tuzla ('HCBSNTU') 4090 5752.5 6475 ('HCYT') 4090 6475
UNO	UNO Zenica ('HCBSNZE') 3830 4090 4854 5215 5752.5 6475
XXX	AHE Sarajevo 5426 7911 8185 8186.3
XXX	many stations 3303.5 4763

BOTSWANA BOT / A2 8O / 68024-68328 / FB / 94G4

AIR	Gaborone Air (A2SK) **11509** = Department of Civil Aviation; Chief Air Traffic Control Officer; POB 250; GABORONE

BOURKINA FASO BFA / XT / 65500-65525 / DF / 89J5

AIR	ASENA Ouagadougou = ASECNA; Representation en Haute-Volta; BP 63; OUAGADOUGOU

BRAZIL B / PP-PY ZV-ZZ / 82000-83999 / SB / 117H3

AF	many BAF stations 9009 11247
AIR	Brasilia Air (reception reports to TASA Rio de Janeiro)
AIR	Manaus Air (reception reports to TASA Rio de Janeiro)
AIR	Recife Air = Servico Regional de Protecao ao Voo de Recife; Chefe Interino do SRPV Recife; Abreu de Miranda; Av. Mal. Mascarenhas de Morais 6211; 51210-001 RECIFE
AIR	TASA Porto Velho = Telecomunicacoes Aeronauticas SA; CP 161; Aeroporto de Belmont; 78900-970 PORTO VELHO
AIR	TASA Rio de Janeiro = Telecomunicacoes Aeronauticas SA; Aeroporto Internacional do Galeao; Hangar No. 2; CP 3112; 21942-900 RIO DE JANEIRO
DIP	German E Brasilia **13945.5 15858.8 16268**
MAR	Belem R (PPL) 2086 2089.5 4247.5 4265 4311 4321 4366 4369 4411 6347 6352 6513 8462 8481 8502 8773 8782 8806 12674 12689 12742 12979.5 13101 13158 13173 16968.0 17002 17170 17223.5 17338 17398 22475 22604.5 22679.5 = Estacao Costeira Belem; Avenida Tavares Bastos; 66615-000 BELEM
MAR	Fortaleza R (PPF) 2089.5 4402
MAR	Itajai R (PPC) 2086 2096.5 4354 4366 4369 6513 8773 8782 8788 8806
MAR	Juncao R (PPJ) 2086 2089.5 4231 4251 4312 4321 4335 4366 4381 4411 6349 6374 6504 6522 8460 8460.5 8497.5 8623 8773 8788 8800 12689.5 12733 12776 12840 13158 16918 17012 17170 17226.5 17290 19779 19794 22496 22605.5 22686.5 = Estacao Costeira Juncao; Rua Otacilio Charao 199; 96203-590 RIO GRANDE
MAR	Manaus R (PPM) 4366 4369 4402 6504 8773 8806 8812 13143 13188 = EMBRATEL; Chefe de Distrito de Operacoes de Manaus; 69000 MANAUS
MAR	Olinda R (PPO) 2086 2089.5 4237 4280 4298 4321 4329 4366 4369 4411 6371 6377 8452.5 8462 8494 8520.1 8548 8773 8788 8800 12692 12766 12840 12958.5 13107 16908 17010 17120 17162 17257 17341 19761 19785 22450 22668.5 22668.5 22694.5
MAR	Rio de Janeiro R (PPR) 2086 2089.5 4244 4247.5 4333 4341 4344 4366 4369 4381 4402 4411 6385 6391 6510 8492 8499 8529 8612 8634 8773 8800 8806 **12594** 12687 12719 12738 12805 12973 13116 13131 16984 16991 17023 17087 17194.4 17272 17278 17386 22534 22603 22670.5 22674.5 22691.5 22807 22822 22831 22843 22846 26145 26154 26157 26166 = Estacao Costeira do Rio de Janeiro; Estrada de Matriz 3286; 23020-710 PEDRA DA GUARATIBA
MAR	Santarem R (PPT) 4366 4381 6510 8773 8788
NAV	BN Belem (PWB) **11139 14608**
NAV	BN Brasilia (PWX) 6860 **12172 14612 14782 15930 16243 19027**
NAV	BN Natal (PWN) **11138.7 14608**
NAV	BN Rio de Janeiro (PWZ) 6375 6420 6435 12795 12900 17122.5 17160 = Estacao de Radio da Marinha no Rio de Janeiro; 1° Distrito Naval; Chefe do Departemento de Operacoes e Comunicacoes; Estrada do Jequia S/N; Ilha do Governador; 21930-010 RIO DE JANEIRO

BRITISH INDIAN OCEAN TERRITORY

BIO / see United Kingdom / - / FJ / 27L11

BRUNEI

BRU / V8 / 96300-96399 / WBA WBS / 18L3

AIR	Bandar Seri Begawan Air = Director of Civil Aviation; Department of Civil Aviation; Brunei International Airport; BANDAR SERI BEGAWAN

BULGARIA

BUL / LZ / 15500-15999 / LB / 82F2

AIR	BBA Sofia **11273**
AIR	Sofia Air = Ministry of Transport; State Aeronautical Inspectorate; 9 Levsky Street; BG-1... SOFIA
DIP	Italian E Sofia **7885.5**
DIP	MFA Sofia ('DOR') **5029 5175 5187.2 5825 8046 8095 8099 8099 9063.3 9108 10154 10158 10165 10174 10480 10482 10484 11007 11053 11054.3 11092.4 11424.5 11521 11625 12112 12114 12124 12130 12133.7 12138 12190 12198.3 12204.8 12209.1 12227 13427 13465 13929 13933 14362 14377 14387 14774.6 14780 14795 14799.3 14836 14840 14851 14855 14964 14981 14987 15610 16015 16025 16030 16036 16064 16115 16185 16188 16190 16320.5 16345 18040 19360 20364**
DIP	Polish E Sofia **8031 9362**
DIP	Swedish E Sofia (SAM 95) **14814.4**
MAR	Bourgas R (LZL) 1662 2750 3764 4262 4282 4342 4414 6342 6423 6484 6510 8472 8564 8684 8770 12689 13131 16944 17182 22717
MAR	Ruse R (LZR) 4251 4432 6507 6513 8710 8806 13161 17353
MAR	Varna R (LZW) 1665 1686 1794 3740 **4218.5** 4314 **4350.4** 4408 4414 4435 6330 6336 6337 6405 6448 6504 6510 **8421.5** 8460 8480 8532 8607 8610 8746 8770 8812 **12587 12659 12660 12840 12940 13125 13131 13191 16879 16918 17055 17145 17344 17386 19782 22486 22702 22717 22822 26151**
MET	Sofia Meteo (LZA/LZU) **4813 11063**
NAV	BN Sofia (LZS) 8676 12870
XXX	Sofia (LZG 7) **12152**

BURUNDI

BDI / 9U / 64390-64399 / HB / 93A9

AIR	Usumbura Air = Ministere des Transports et de l'Aeronautique; Direction de la Regie des Services Aeronautiques; Le Chef du Service des Telecommunications Aeronautiques; BP 694; USUMBURA

CAMBODIA

CBG / XU / 48960-48999 / VD / 25G6

AIR	Phnom Penh Air = Ministere des Travaux Publics et des Telecommunications; Direction de l'Aviation Civile; BP 86; PHNOM PENH
DIP	Cuban E Phnom Penh (CLP ..) **16025**
DIP	Polish E Phnom Penh **16201**
MAR	Kompong Som Ville R (XUK) 4342 8480 8680

CAMEROON

CME / TJ / 64850-64999 / FK / 84F5

AIR	ASECNA Douala = ASECNA; Representation au Cameroun; Chef Service d'Exploitation des Telecommunications; Le Representant de l'Agence; BP 4063; DOUALA
DIP	French E Yaounde ('YNDE') **16024**

MAR	Douala R (TJC) 8449 8770 8800 13069 13155 17237 = Station Cotiere Douala Radio TJK; Chef de la Station; DOUALA

CANADA CAN / CF-CK CY-CZ VA-VG VO VX-VY XJ-XO / 71000-71999 / CU-CZ / 97

AF	CF Edmonton, ALTA (VXA) 5717 6706 6754 9007 9010 9023 11214 13254 13257 15034 17994 18027
AF	CF Saint John's, NFLD (CJX) 5717 6694 6745 6754 9007 9010 13254 13257 15034
AF	CF Trenton, ONT (CHR) 4704 5717 6706 6715 6736 6745 6754 6760 8989 9007 9010 9023 11214 13527 15034 17994 18012 = Canadian Forces Base Trenton; OIC/NCOI Communications; ASTRA, ONT K0K 1B0
AF	CF Vancouver, BC (CJU) 5717 6715 13247
AF	many RCAF stations 11232
AIR	Gander Air = Transport Canada; Gander International Flight Service Station; Flight Services Area Supervisor; 89 Edinburgh Avenue; Box 400; GANDER, NFLD A1V 1W8
CG	CCG Cartwright, NFLD (VOK) 2514 2538 2582 2598 4375 = Station VOK; POB 610; GOOSE BAY, LAB A0P 1S0
CG	CCG Charlottetown, PEI (VCA) 2530 2582
CG	CCG Churchill, MAN (VBA) 2582 4375 6370
CG	CCG Courtenay, BC (VAC) 2054
CG	CCG Grindstone Island, QUE (VCN) 2514 2582 2749
CG	CCG Inuvik, NWT (VFA) 2558 4292 4363 5803 6351.5 6501 8456 8794 12671 13116
CG	CCG Iqaluit, NWT (VFF) 2514 2582 *3253* 4236.5 4375 6335.5 6513 *7710* 8443 8752 12671 13077 = Coast Guard Radio Station; POB 189; FROBISHER BAY, NWT X0A 0H0 [telefax ++1 613 2418483]
CG	CCG Mont Joli, QUE (VCF) 2582
CG	CCG Montreal, QUE (VFN) 2514
CG	CCG Prince Rupert, BC (VAJ) 2054
CG	CCG Quebec, QUE (VCC) 2514 2582 = Transport Canada; Quebec Coast Guard; 101 Boulevard Champlain; QUEBEC, QUE G1K 4H9
CG	CCG Resolute, NWT (VFR) 2582 *3253* 4334 4375 6438 *7710* 8791 = (reception reports to Environment Canada; Ice Services; Ice R&D Group; 373 Sussex Drive; La Salle Academy; Block E; OTTAWA, ONT K1A 0H3 [telefax ++1 613 2418483])
CG	CCG Riviere-au-Renard, QUE (VCG) 2514 2582 = Transport Canada; Coast Guard Radio Station; Manager of Operations; BP 100; RIVIERE-AU-RENARD, QUE G0E 2A0
CG	CCG Saint Anthony, NFLD (VCM) 2514 2582 2598 = Saint Anthony Coast Guard Radio; POB 157; SAINT ANTHONY, NFLD A0K 4S0
CG	CCG Saint John's, NFLD (VON) 2514 2538 2582 2598 = CCG Radio Station Saint John's; Area Operations Manager; POB 1300; Saint JOHN'S, NFLD A1C 6H8
CG	CCG Saint Lawrence, NFLD (VCP) 2514 2538 2582 2598
CG	CCG Sept Iles, QUE (VCK) 2514 2582 2598
CG	CCG Stephenville, NFLD (VOJ) 2514 2538 2582 2598 = Stephenville Coast Guard Radio; 58 Alabama Drive; STEPHENVILLE, NFLD A2N 2X5
CG	CCG Sydney, NS (VCO) 2530 2582 2749 = Sydney Coast Guard Radio; Area Operations Manager; Telecommunications and Electronics; POB 863; SYDNEY, NS B1P 1C6
CG	CCG Tofino, BC (VAE) 2054 2458
CG	Tors Cove R, NFLD (VCT) 2161 2487 2510 2760 **4217.5** 4360 **6329.5** 6507 **8422 8435** 8797 **12610.5** 13095 13191 16844 17290 17380 19788 22834 26163 = VCT Globe Wireless; Engineering Department; 1 Meyn Road; POB 56; HALF MOON BAY, CA 94019; USA [telefax ++1 415 7268604; *http://www.globewireless.com/*]

CG CCG Vancouver, BC (VAI) 2054 **4214.5** 4235 4384 6493 6513 **8428.5** 8453 8737 **12599.5** 12876 13095 16822 17171.2 17175.2 17263 **22391.5** **22638.5** 22753 = Vancouver Coast Guard Radio; Telecom Operations Manager; 109 4611 Cowley Crescent; RICHMOND, BC V7B 1B9
CG CCG Yarmouth, NS (VAU) 2538 2582 2749
DIP Polish E Ottawa, ONT **14448**
DIP Turkish E Ottawa, ONT **10436**
NAV CF Halifax, NS (CFH) *122.5* *4271* 4560 **5097** 5684 5717 *6496.4* 6694 6715 6745 9007 9010 *10536* **10945** 13254 *13510* **15920** 18027 = Canadian Forces Meteorology and Oceanographic Centre; Acting Senior Staff Officer; Maritime Forces Atlantic Headquarters; FMO Halifax; CFB; HALIFAX, NS B3K 2X0 [telefax ++1 902 4276381]
NAV CF Victoria, BC (CKN) **3286.5** *4268* **6384.5** *6456* 6501 6694 6754 **12702** *12753* **16960** = (reception reports to OIC CFFC; CFB Comox; LAZO, BC V0R 2K0)
TSF Ottawa TS, ONT (CHU) 3330 7335 14670 = Radiostation CHU; National Research Council; Observatory Crescent; OTTAWA, ONT K1A 0S1

CANARY ISLANDS

CNR / see Spain / 60000-60099 / GC / 96U11

MAR Arrecife R 1644 2586
MAR Las Palmas R (EAL) 1689 2820
MOI GC Las Palmas **13376.5**

CAPE VERDE

CPV / D4 / 08581-08599 / GV / 89o10

AIR Sal Air (D4B) **9154** = Servico de Informacao Aeronautica; Central Radio; Aeroporto Internacional; AMILCAR CABRAL, Sal
MAR Mindelo R, Sao Vicente (D4A) 2439 2601 2645 4292 4393 4432 6488 8469 8642 8722 8755 12700 12993 13083 13095 17055.6 17284 17344 22581 22714 22759 = Ministerio dos Transportes e Comunicacoes; Direccao dos Servicos dos Correios e Telecomunicacoes; Estacao Costeira D4A; MINDELO, Sao Vicente
MAR Praia R, Santiago (D4D) 2341 2439 4292 4408 8469 8776 12700 13128 17308

CAYMAN ISLANDS

CYM / see United Kingdom / 78383-78384 / MW / 116D5

AIR Georgetown Air = Director of Civil Aviation; POB 277; GEORGETOWN, Grand Cayman

CENTRAL AFRICAN REPUBLIC

CAF / TL / 64600-64699 / FE / 89H8

AIR ASECNA Bangui = ASECNA; Le Representant aupres de la Republique Centrafricaine; BP 828; BANGUI
DIP French E Bangui ('BGUI') **16236**
MIL FF Bangui ('RFFXI') **16227.7**

CHAD

TCD / TT / 64700-64799 / FT / 89H5

AIR ASECNA N'djamena = ASECNA; Representation du Tchad; Service des Installations Techniques; Le Chef du Service Maintenance; BP 70; N'DJAMENA
DIP Egyptian E N'djamena **16041.7**
DIP French E N'djamena ('NDJA') **18527** **20427**

MIL	FF N'djamena **('RFPTC') 10467.7 14585.7 16147.7 16305.7 16627.7** **('RFTPA') 6836.7**

CHILE

CHL / CA-CE XQ-XR 3G / 85400-85999 / SC / 117G4

AIR	LAN Santiago 9034
AIR	Santiago Air = Direccion General de Aeronautica Civil; Departamento Comunicaciones Aeronauticas; Aeropuerto Arturo Merino Benitez; SANTIAGO
MAR	Antofagasta R (CBA) 2738 8461 = Armada de Chile; Gobernacion Maritima de Antofagasta; Casilla 481; ANTOFAGASTA
MAR	Juan Fernandez R (CBF) 2738
MAR	Puerto Montt R (CBP) **1997.5**
MAR	San Pedro R (CBS) 2738
MAR	Valparaiso R (CBV) 1997.5 2738 **4214.5** *4228* 4256 4265 4301 4337 4349 6337 6372 6379.5 6393 6407.5 6414 6428 6467 8420.5 8421.5 8453 8461 8478 8522 8606 *8677* **12583.5** 12663 12714 12747.5 12768 12826.5 12856 12898.5 12957 **16811** 16914.5 16947.6 16956 17002.4 17039 22447 22473 22546 = Playa Ancha Radio CBV; Centro de Telecomunicaciones Maritimas de Valparaiso; Subida Carvallo s/n; Playa Ancha; VALPARAISO
NAV	CN Magallanes (CCM) **4818.3**
NAV	CN Santiago (CCS) **4764 6419 14373.2** = Armada de Chile; Comandancia en Jefe; Jefe; Servicio Telecomunicaciones; SANTIAGO
XXX	ANI Puntas Arenas 11228 15026

CHINA

CHN / B XS 3H-3U / 50000-59999 / ZB-ZH ZL ZP-ZY / 17E5

AIR	Beijing Air (BSQ) 11240 = Civil Aviation Administration of China; Telecommunications Department; 155 Doug-si West Street; POB 644; 100 000 BEIJING
DIP	Polish E Beijing **9297**
DIP	Swedish E Beijing (SAM 62) **17428.9**
MAR	Basuo R (XSH) 2605 4278 6370 8634 12912
MAR	Beihai R (XSK) 4244 6379.5 8530
MAR	Dalian R (XSZ) 2465 4253 4305 4351 6333.5 8678 8694 12710 12799.5 17126 = Dalian Radio; 1 Gangwan Street; Zhongshan District; DALIAN
MAR	Dandong R (XSB 48) 4271 8459
MAR	Fangcheng R (XSL 22) 4260 8650
MAR	Fuzhou R (XSL) 4343 4369 6407.5 8598 8755 12662 12727.5
MAR	Guangzhou R (XSQ) 2620 **4212** 4288 4340 4366 4384 4423 6390 6461 6510 8455 8490 8514 8624 8661 8746 8761 8782 12613 12700 12877 12997 13054 13095 13107 13149 16880 16950 17080 17091 17216.9 17248 17281 17398 **22420** 22452 22525 22735 22771 = Guangzhou Coast Radio Station; 13th Floor; 40 Binjiang West Road; POB 1181; GUANGZHOU
MAR	Haikou R (XSR) 2710 4266 4411 6400.5 8702 8764 12705
MAR	Haimen R (XSK 4) 2820 4309.2 6435.5 8671
MAR	Lianyungang R (XSF) 2680 4326 6477.5 8622
MAR	Longkou R (XSS) 2600
MAR	Nanjing R (XSA 2) 2578 4331 4426 8645
MAR	Ningbo R (XSN) 2545 4222 6383 8582
MAR	Qingdao R (XST) 2605 4334 6369 8546 8691 12790
MAR	Qinhuangdao R (XSE) 4240 6442 8484.5 12889.5
MAR	Quanzhou R (XSM 4) 4330 8525
MAR	Sanya R (XSI) 4310 6435.5 8651 12804

MAR	Shanghai R (XSG) 2605 2610 4271 4290 4319 4360 4369 4420 **6326 6414.5** 6452 6454 6501 **8433** 8451 8487 8502 8665 8752 8770 8803 8806 **12649.5** 12661.5 12856 12871.5 12898 12954 13083 13113 13188 **16892 16898** 16916.5 17002.4 17030 17103.2 17263 17308 22694 22714 22750 = Shanghai Coastal Radio Station XSG; Shanghai Haixing Shipping Co Ltd; 20 Guang Dong Road; SHANGHAI
MAR	Shantou R (XSP) 2578 4228 6457 6463.5 8457 12734
MAR	Tianjin R (XSV) 2600 2750 4283 4372 4399 4426 6484.5 6510 8600 8617 8755 8764 8794 12822 12969 13092 13122 17132 17238.9 17269 17338 22487 22658 22696 = Tianjin Coast Radiostation; Jiefang Door; Xinggang Tanggu; TIANJIN
MAR	Wenzhou R (XSO) 2660 4293 6449.5 8586
MAR	Xiamen R (XSM) 2600 4314 6458 8453 12876
MAR	Yantai R (XSU) 2627 4274 4381 6428.5 8574 8764 12817.5 13077 17332
MAR	Yingkou R (XSD) 4343 6370 8629 12740
MAR	Zhanjiang R (XSJ) 2783 4295 6474 6489 8541 8614 12890 16968.8 22616.5
MET	Beijing Meteo (BAA/BAF) **3350 5180** *5526.5* **5730 7350 7815** *8122 10117* **10320 12922 14340** *14367 16026 18237* = State Meteorological Administration; Department of Weather Forecasting and Warning; Telecommunications Division; Deputy Chief; 46 Baishiqiao Road; Western Suburb; BEIJING 100081 [telefax + +86 10 8311191]
MET	Chengdu Meteo (BLM) **10470**
MET	Lanzhou Meteo (BSB) **4905 6985**
MET	Shanghai Meteo (BDF) *5100 7420 11420 18940* = Shanghai Central Meteorological Office; Puxilu 166; SHANGHAI
MET	Ürümqi Meteo (BZC 75) **3780 4470 5190 11570**
MET	Wuhan Meteo (BJZ) **4482 5315 6950 7863 10650 12920**
TSF	Xi'an TS (BPM) 2500 5000 10000 15000 = Shaanxi Astronomical Observatory; Academia Sinica; Chief of Science/Technique Section; POB 18; LINTONG near Xi'an
XXX	Baoshan **7538.6**
XXX	Mangshi Airport **7538.6**
XXX	Ruili **7538.6**

CHRISTMAS ISLAND

CHR / see Australia / 96995 / YPXM / 26V3

MAR	Flying Fish Cove R 8176

COCOS (KEELING) ISLANDS

ICO / see Australia / 96996 / YPCC / 26V1

AIR	Panjang Air = Department of Aviation; Officer-in-Charge; POB 1; PANJANG 6799

COLOMBIA

CLM / HJ-HK 5J-5K / 80000-80399 / SK / 119C5

AIR	Bogota Air = Departemento Administrativo de Aeronautica Civil; Centro Nacional de Aeronavegacion; Aeropuerto Internacional El Dorado; Apartado Aereo 12307; BOGOTA
AIR	Cucuta Air = Departemento Administrativo de Aeronautica Civil; Aeropuerto Camilo Daza; Apartado Aereo 114; CUCUTA
AIR	Magangue Air = Departemento de Aeronautica Civil; Aeropuerto Baracoa; Apartado Aereo 112; MAGANGUE, Bolivar
MAR	Barranquilla R (HKB) 2046 2053 4277 4354 4372 6463.5 6519 8700.4 8707 8794 13083 13173 13176 17004 17365 17368 22816 22819
MAR	Buenaventura R (HKC) 2049 3282 4325 4354 4372 6386.5 6519 8574 8707 8794 12853.5 13083 13173 13176 17045.6 17365 17368 22816 22819 = (reception reports to ENTEL Bogota)

PTT ENTEL Bogota = Empresa Nacional de Telecomunicaciones; Carrera 23 No. 13-49; BOGOTA

COMOROS
COM / D6 / 67000-67004 / FMC / 95A1

AIR ASECNA Moroni (D6Z) **5362 7763.5** = Service de l'Aviation Civile; BP 72; MORONI

CONGO
COG / TN / 64400-64499 / FC / 91D4

AIR ASECNA Brazzaville (TNL) **10132 12070.5 14462.5** = ASECNA; Representation au Congo; Service Meteorologique; Centre Regional des Telecommunications Meteorologiques; BP 218; BRAZZAVILLE
MAR Pointe-Noire R (TNA) 2705 8453 12682.5 = (reception reports to ONPT Brazzaville)
PTT ONPT Brazzaville = Office National des Postes et Telecommunications; Avenue Patrice Lumumba; BRAZZAVILLE

COOK ISLANDS
CKH / see New Zealand / 91800-91811 91826-91847 / NC / 122L10

MAR Aitutaki R (ZKO) 2012
MAR Avarua R (ZKR) 2207 8449 8791 13140 = (reception reports to C+W Rarotonga)
MAR Penrhyn R (ZKJ) 2012
MAR Rarotonga R (ZKRT) *12215.5* = (reception reports to C+W Rarotonga)
PTT C+W Rarotonga = Cable and Wireless PLC; POB 47; RAROTONGA

COSTA RICA
CTR / TE TI / 78750-78774 / MR / 115M4

AIR San Jose Air = Ministerio de Obras Publicas y de Transportes; Direccion General de Aviacion Civil; Apartado 5026; SAN JOSE

CROATIA
HRV / 9A / 14200-14499 / LD / 81B5

DIP MFA Zagreb **11154**
DIP Swedish E Zagreb (SAM ..) **11046.9 12103.1**
DIP Turkish E Zagreb **10433**
IRC ICRC Dalj ('RC2DAL') **5144 5154 5159 5164 5169**
IRC ICRC Knin ('RC2KNI') **3802 5144 5154 5159 5164 5169 6999.5**
IRC ICRC Okucani ('RC2OKU') **5164 5169**
IRC ICRC Osijek ('RC2OSI') **3804.4 5144 5154 5164**
IRC ICRC Petrinja ('RC2PET') **5154**
IRC ICRC Split ('RC2SPL') **5144 5154 5159 5164 5169** 6996
IRC ICRC Vojnic ('RC2VOJ') **5144 5149 5154 5159 5164 5169**
IRC ICRC Vukovar ('RC2VUK') **5154 5169**
IRC ICRC Zagreb
('RC2MBO') **3802 3818 5144 5154 5159 5164 5169 5170.7**
('RC2ZAG') **3802 3803.6 3804.4 3818 5144 5149 5154 5159 5164 5169 6996 6997.4 6999.5 10283**
MAR Rijeka R (9AR) 1641 1656 4304 4331 4346 4378 4405 6421.5 6501 6504 6510 6513 8421.5 8445 8514 8700 8710 8746 8746 8782 8806 12604.5 12780.5 12907.5 13146 13161 13191 16838.5 16942.5 17045.6 17175.2 17272 17320 17395 19788 19794 22443 22563.5 22711 22810 = Rijeka Radio 9AR; Obalna Radio Stanica; Chief Engineer; 51005 RIJEKA SOPALJ
MIL FF IFOR Zagreb 2461

MIL	FF Zagreb ('RFFBBYZ') **7442.5 9368**
MIL	many NATO stations **3191 4039 4547 4930.5 5110 5310 7904**
UNO	UNO Metkovic ('HCHRVME') **4090 4854 5752.5 6475 9004** ('HCYM') **6475**
UNO	UNO Senj ('HCHRVSJ') **9004**
UNO	UNO Split ('HCHRVSP') **4090 4615** ('HCYS') **6475**
UNO	UNO Zagreb ('HCHRVZA') **3830 3831.7 4090 4091.7 4615 4854 5215 5752.5 5754.2 6475 6476.7 8031 9004** ('HCHZ') **4090 4615 4852.5 4854 6475**
XXX	AHE Split **8186.3**
XXX	many stations **4763**

CROZET ARCHIPELAGO

CRO / see France / 61997 / - / 26N16

PTT	DTRE Base Alfred-Faure (FJY 5) **11421.7**

CUBA

CUB / CL-CM CO T4 / 78150-78379 / MU / 116D4

AIR	CUBANA Habana (CMI) **11226**
AIR	Habana Air = Ministerio del Transporte Aerea Aeronautica; Calle 23 no. 64 vedado; Plaza de la Revolucion; Apartado 6215; HABANA
DIP	Algerian E Habana **10993.7 16318.5**
DIP	MFA Habana (CLP 1) **13940 14449.5 14510.3 15953 16179 16185 16350 16355 17470 18039 18051 18448 18774.2 20447 21956.6**
DIP	Swiss E Habana (HBD 46) **13954.5 13965.5 13976 16118**
MAR	Arroyos de Mantua R (CLF 2) **2569 2760**
MAR	Baracoa R (CLM 3) **2760 2794**
MAR	Cienfuegos R (CLC) **2760 2783**
MAR	Habana R (CLA) **4235 6482 8496 8541 8573 8609 8737 8743 8758 12673.5 12748 12792 12828 13062 13116 13125 13158 16961 16996 17023 17165.6 17275 17317 17323 22610.5 22649 22750 22789** = Havana Radio; Centro Receptor Internacional; Traffic Manager; Alamar; Apartado 21056; HABANA 12500 (CLS) **8489 13014 16921 22661** (CLT) **2582 2711.5 2760**
MAR	Isabela de Sagua R (CLC 2) **2760**
MAR	Nueva Gerona R (CLT 3) **2198 2760**
MAR	Nuevitas R (CLK) **2694 2760**
MAR	Santa Cruz del Sur R (CLK 2) **2552 2760**
MAR	Santiago de Cuba R (CLM) **2419 2760**

CYPRUS

CYP / C4 H2 P3 5B / 17600-17619 / LC / 83K13

AF	RAF Akrotiri (GFW) **6712 9031 11234 11247 18018** (MKD) **10317.5 10495 10800.5 11430.5 12205 14402.5 14460.5 14550.5 14550.9 14855 16277 18902.5** = RAF Communications Station MKD; Chief Signals Officer; BFPO 52; AKROTIRI
AIR	Nicosia Air = Ministry of Communications and Works; Department of Civil Aviation; 25 St. George's Hill; NICOSIA
DIP	Egyptian E Nicosia **7838.7**
DIP	French E Nicosia ('NCSE') **17512**

MAR	Nicosia R (5B) 2670 2700 4347.5 4372 4396 4432 6507 8623 8737 8770 8776 8803 12666.5 12931 13077 13098 13164 14564 17013 17248 17335 22729 22747 = (reception reports to CTA Nicosia)
PTT	CTA Nicosia = Cyprus Telecommunications Authority; Head Office; Manager Engineering Resources and Technical Services; Telecommunications Street; POB 4929; NICOSIA 142

CZECH REPUBLIC

CZE / OK-OL / 11400-11799 / LK / 62H6

AIR	Prague Air = Air Traffic Control Administration; Rizeni letoveho provozu; TEI department; Director; Letiste Praha-Ruzyne; CZ-16008 PRAGUE
DIP	French E Prague ('F9S') **7953**
DIP	MFA Prague (OLZ) **4900 5070 5746 6845 6872 7960 9278 10729 12210 12216 13920 14812 16270 16304 16355 18300 18320 20619** = (reception reports to PTT Prague)
DIP	Mongolian E Prague (OLZ 24) **14584**
MAR	Prague R (OLP) 6440 8544 13007 16977
MET	Prague Meteo (OL) **3196 4336** = Cesky Hydrometeorologicky Ustav; Czech Hydrometeorological Institute; Hydrometeorological Department; Chief; Na Sabatce 17; CZ-14306 PRAGUE
PTT	PTT Prague = Federal Ministry of Transport, Posts and Telecommunications; Chief Engineer of Radiocommunications Division; Olsanska 5; 13074 PRAGUE
XXX	Prague (OLX) 3280 5302 6758 8143 11417 14978 (OMV) **6923.5**

DENMARK

DNK / OU-OZ XP 5P-5Q / 06000-06199 / EK / 53

AF	DAF Karup (OWE) 4703
AF	DAF Vaerloese (OWD) 6720 6731 9035 11245.5 13540
AIR	Copenhagen Air = Civil Aviation Administration; Department of Air Navigational Facilities and Services; Kigkurren 6-8, M; DK-2300 COPENHAGEN
DIP	MFA Copenhagen (OZU 25) **7468.9 16285** 19107 19109 19622
DIP	Polish E Copenhagen 7383
MAR	Lyngby R (OXZ) 1613 1704 1734 1767 2586 2593 2645 4215.5 4303 4357 4381 4399 4408 4414 4426 4429 **6318.5 6446.8** 6507 6513 8421 8427 8598 8725 8740 8749 8770 8785 8791 8797 12592 12601.5 12753.5 12916.5 13104 13116 13125 13131 13143 13152 16815.5 16821.5 16920 17068.4 17203.9 17248 17254 17281 17290 17293 17305 17344 **22385 22459** 22587.5 22602.5 22702 22726 22732 22741 22747 22777 22801 25262 26145 26148 = Telecom AS; Lyngby Radio; Bagsvaerd Mollevej 3; DK-2800 LYNGBY
MAR	Torshavn R (OXJ) 1641 1758 = Torshavn Radio OXJ; Det Store Nordiske Telegraf-Selskab A/S; Tinghusvegur 76; Postboks 1288; DK-3800 TORSHAVN
MET	Copenhagen Meteo (OXT) *5850 9360 13855 17510* = Danmarks Meteorologiske Institut; Vejrtjenesten; Chief of Communication; Lyngbyvej 100; DK-2100 COPENHAGEN
NAV	DM Frederikshavn (OVG) 2517 ('RDFEI') **2710**
NAV	DM Stevns (OUA) 122.3 2357.5
NAV	DM Torshavn, Faroe Islands (OVL) 11245.5 13540

DIEGO GARCIA

DGA / see United States of America / 61967 / FJ / 27L11

NAV	USN Diego Garcia (NKW) *7582* 12804 *12806* 13254 14352 14965.5 20298 *20302* = US Naval Computer and Telecommunications Station Diego Garcia; Communications Department; Head Officer; FPO AP 96464-0008; USA

DJIBOUTI

DJI / J2 / 63100-63149 / HF / 87J5

AIR	Jibuti Air = Direction de l'Aviation Civile et de la Meteorologie; Bureau de Piste; Aeroport de Jibuti-Ambouli; BP 204; JIBUTI
DIP	French E Jibuti ('DJBT') **18059 20092**
MAR	Jibuti R (J2A) 1813 2586 4262 4408 6348 8510 8682 8797 12728 13104 = (reception reports to PTT Jibuti)
MIL	FF Jibuti ('RFQP') **7755.2 8050.2 8108.2 9079.7 10400.2 10638.7 10814.2 13444.2 16125.2 16193.2** = (reception reports to FN Paris, France)
NAV	FN Jibuti (FUV) **8568 13042.5 16905 22447** = (reception reports to FN Paris, France)
PTT	PTT Jibuti = Centre des Telecommunications Internationales; Office des Postes et Telecommunications; Reseau General Radioelectrique; Le Chef de Centre; Boulevard de la Republique; BP 2031; JIBUTI

DOMINICA

DMA / J7 / 78905-78914 / TD / 116o7

AIR	Roseau Air = Ministry of Communications and Works; Department of Civil Aviation; ROSEAU
POL	Roseau Police 7850

DOMINICAN REPUBLIC

DOM / HI / 78450-78499 / MD / 116J5

AIR	Santo Domingo Air = Direccion General de Aeronautica Civil; Edificio de "Telecomunicaciones"; Isabel la Catolica 73; SANTO DOMINGO
MAR	Santo Domingo Pilot R (HIA) 2638 2738 8642

EASTER ISLAND

PAQ / see Chile / 85469 / SCIP SCIZ / 122V16

MAR	Hanga Roa R (CBY) 2738

ECUADOR

EQA / HC-HD / 84000-84299 / SE / 119B8

AIR	Quito Air = Direccion General de Aviacion Civil; Buenos Aires 149 y 10 de Agosto; Casilla 2077; QUITO
MAR	Guayaquil R (HCG) 4237 4387 6456 6504 8474 8731 12711 13095 16948 = Direccion de la Marina Mercante y del Litoral; Malecon Simon Bolivar y Clemente Ballen; GUAYAQUIL
NAV	EN Quito (HDN) **12225 17547**
TSF	Guayaquil TS (HD2 IOA) 3810 5000 7600 = Instituto Oceanografica de la Armada; Jefe del Departemento de Ayudas a la Navegacion; Casilla 5940; GUAYAQUIL

EGYPT

EGY / SSA-SSM SU 6A-6B / 62300-62599 / HE / 85J6

AIR	Cairo Air = Egyptian Civil Aviation Authority; COM/OPS Director General; 31, 26th July Street; CAIRO
DIP	Belgian E Cairo **11105**

DIP	French E Cairo ('O9B') **13549 14542 16230 16240 16257**
DIP	German E Cairo **11459 14663.5 16017.5**
DIP	Hungarian E Cairo (HGX 56) **14840.8**
DIP	Indonesian E Cairo **15991.5 18931.5**
DIP	MFA Cairo **5036.7 6781.7 6871.7 7616.7 7631.7 7728.7 7871.7 8101.7 8106.7 8166.7 8272.7 9216.7 11026.7 11181.7 11291.7 12219.7 12469.7 12546.7 13318.7 13341.7 13347.7 13401.7 13486.7 14043.7 14445.7 14451.7 14501.7 14543.7 14621.7 14867.7 14901.7 14943.7 14991.7 15043.7 15801.7 15926.7 16020.7 16026.7 16071.7 16113.7 16318.7 16327.7 16331.7 16501.7 17171.7 17476.7 18156.7 18721.7 19567.7 20036.7**
DIP	Polish E Cairo **13988**
DIP	Romanian E Cairo **14521**
DIP	Swedish E Cairo (SAM 50) **14970.9**
DIP	Swiss E Cairo (HBD 61) **13976 16102 18279.5**
DIP	Turkish E Cairo **15843**
MAR	Alexandria R (SUH) 1737 1752 2662 2817 4347.9 4408 6342.6 6513 8578.5 8767 12970.5 13122 16912.5 17124.4 17269 22771 = Alexandria Radio; 9th Floor; Manshia Square; ALEXANDRIA
MAR	Port Said R (SUP) 2840 4325 6425 8473 13060 = Port Said Radio; 15 Sultan Hussein Street; PORT SAID
MAR	Quseir R (SUK) 1638 1680 1728 1849
MAR	Serapeum R (SUZ) 4255 6409.5 8450 12670.5
MET	Cairo Meteo (SUU) **3959** *4526.5* **7319** *10123* **18254** = Ministry of Civil Aviation; Meteorological Authority; Telecom Section; Engineer in Charge; POB 11784; CAIRO [telefax ++20 2 2849857]
XXX	Sharm el Sheikh 8028

EL SALVADOR

SLV / HU YS / 78650-78674 / MS / 115o11

AIR	San Salvador Air = Direccion General de Aeronautica Civil; Aeropuerto Internacional; ILOPANGO

EQUATORIAL GUINEA

GNE / 3C / 64800-64849 / FG / 91A2

AIR	Malabo Air = Ministerio de Comunicaciones y Transportes; Direccion General de Transportes; Apartado 416; MALABO
MAR	Bata R (3CA 4) 4244
MAR	Malabo R (3CA) 4337 8706 17165.6

ERITREA

ERI / E3 / 63000-63099 / HH / 87G3

AIR	Asmara Air = Civil Aviation Authority; Navigational Aids and Communications; POB 252; ASMARA
DIP	Egyptian E Asmara **14986.7**
MAR	Assab R (ETC) 4363 6340.5 6513 8618 8731 12673.5 = (reception reports to ETA Addis Ababa)
UNO	UNO Asmara **20734**

ESTONIA

EST / ES / see Russian Federation / EE / 46E1

AIR	Tallinn Air 4645
MAR	Pärnu R (ESP) 1650 3230 4240 6430 6475 8535 8650 13065 17105 22619.5

MAR Tallinn R = Tallinn Radio ESA; Manager; 3/5 Estonia Boulevard; 0101 TALLINN (ESA) 2610 2795 3310 4285 4420 6405 6485 8650 8761 **12593 12594.5** 12723 12755 13101 16826 17077 17359 22786
(ESF) **4210.5 8422** 12594.5

ETHIOPIA

ETH / ET 9E-9F / 63300-63599 / HA / 87F6

AIR Addis Ababa Air = Civil Aviation Authority; Engineering Department; Head Nav-aid & Communications; POB 978; ADDIS ABABA
(ETD 3) **3850 4512.5 6877.8 9462.5**
(-) 7595
AIR EA Addis Ababa (ETK 4) 11256
DIP Czech E Addis Ababa ('2B6') **18629**
DIP German E Addis Ababa **11538.3**
DIP Swedish E Addis Ababa (SAM 70) **16106.9 18688**
DIP Turkish E Addis Ababa **15843 16908**
IRC ICRC Addis Ababa (ETC 88) **13974.2**
PTT ETA Addis Ababa = Ethiopian Telecommunications Authority; Head Office; Radio Division; POB 1047; ADDIS ABABA
UNO UNO Dire Dawa **7886.7 14643.7**
UNO UNO Gambela **7886.7**

FALKLAND ISLANDS (MALVINAS) AND DEPENDENCIES

FLK / see United Kingdom / 88880-88903 / SF / 121E9

AF RAF Stanley 11234 11247
XXX BAS Argentine Islands (ZHF 44) 9106 = (reception reports to Postmaster General; PORT STANLEY)

FIJI

FJI / 3DN-3DZ / 91650-91699 / NF except NFT / 10Q5

AIR Nadi Air 7607 = Nadi Airadio; Operations and Safety Division; Communication Services; Station's Communications Officer; POB 183; Airport; NADI
CY USP Suva 12140
MAR Suva R (3DP) 2111 4372 6504 8690 8746 12700 13080 = (reception reports to FITEL Suva)
PTT FITEL Suva = Fiji International Telecommunications Ltd; POB 59; SUVA
PTT PTT Rotuma Island (3DQ) 6894 7770 8070
PTT PTT Suva (3DP) 6894 7770 8070

FINLAND

FIN / OF-OJ / 02800-02999 / EF / 51

AIR Helsinki Air = National Board of Aviation; POB 50; FIN-01531 VANTAA
DIP Bulgarian E Helsinki **14735**
DIP Polish E Helsinki **9291**
DIP Romanian E Helsinki **16047 16053 16062**
DIP Swiss E Helsinki (HBD ..) **10973**
DIP Turkish E Helsinki **10433**
MAR Hailuoto R 1862
MAR Helsinki R (OFJ/OHG) 1638 1671 1719 2810 4271 4393 4405 6355 8457 8728 8803 12687 13092 13155 16923.8 17281 17353 22609.8 22705 22759 = (reception reports to PTT Helsinki)
MAR Kotka Radio; Station Manager; Pl 2; FIN-48221 KOTKA
MAR Mariehamn R (OFH) 1677
MAR Raippaluoto R 2803
MAR Vaasa Radio; FIN-65380 VAASA

PTT	PTT Helsinki = General Directorate of Posts and Telecommunications; Telecommunications Department; International Section; POB 53; FIN-00211 HELSINKI
FRANCE	F / F HW-HY TH TK TM TO-TQ TV-TX / 07000-07999 / LF / 67
AF	FAF Aix (FDI) 6836
AF	FAF Bordeaux (FDG) 4914.5 5686.5 5716.5 6739.5 7572.5
AF	FAF Colmar (FDC 8) 4883
AF	FAF Evreux (FDE 5) 4801.5 6712
AF	FAF Istres 6712
AF	FAF Metz (FDC) 2929.3 3768.5 3833 4601.5 5446.5 5804.5 6844.5 6859 7472.5 7834.5 7917 8094.5 9970 10470.5 = Armee de l'Air; F.A.Tac. - 1ere R.A.; Commandement Regional des Transmissions de la Force Aerienne Tactique et de la 1ere Region Aerienne; Metz Air; F-57039 METZ Cedex
AF	FAF Mont-de-Marsan (FDG 2) 5446.5
AF	FAF Narbonne (FDI 22) 3379.5 4596 4615 5163.5 6871 7592.5 7722.5 7859 10966
AF	FAF Nice (FDI 8) 4941.5 5240 5325.5 6875
AF	FAF Orleans (FDY) **4542.5 4856 5342 5367.5 5795 6740.7 6798 6966 7311 7321.5 7362.5 7407.5 7521.5 7671.5 7727.5 8142.5 7663.5 7998.5 9431.5 10308.5 15667 16077.5** = French Air Force Communications Station FDY; BA 123; F-45037 ORLEANS Cedex
AF	FAF Paris ('RFFVA') **7644.2** = (reception reports to Radio Club de la BA 117 F6TNB; Bat. 22 Piece 561; 24 Boulevard Victor; F-75015 PARIS)
AF	FAF Strasbourg (FDC 7) 4883
AF	FAF Tours (FDE 2) 3306.5 5350 5803 7378
AF	FAF Villacoublay (FDE) 3790 5010 5455 6712
AIR	Paris Air = Ministere des Transports; Direction Generale de l'Aviation Civile; Direction de la Navigation Aerienne; L'Inspecteur Technique; 93 Boulevard du Montparnasse; F-75006 PARIS Cedex
DIP	Algerian E Paris (7RP 20) **10997 12256.5 18180.7**
DIP	Bulgarian E Paris **10320**
DIP	Egyptian E Paris **10411.7**
DIP	MFA Paris ('P6Z'/'RFGW') **7634 9075 9259 9380 10425 10726.5 11072.5 11085 11173.5 11572 13551.5 13953 14462 14486 14508 14530 14575 14661 14975 15597.7 15686 15873 15898 16260 16336.5 18203 18760 20556**
DIP	Polish E Paris **4912 10653 13403**
DIP	Romanian E Paris **16252**
DIP	Swiss E Paris (HBD 60) **5757 5773**
MAR	Arcachon R (FFC) 1820 1862 2775 3722 = Centre Radiomaritime de Bordeaux-Arcachon; Le Chef de Centre; F-33311 ARCACHON
MAR	Boulogne-sur-Mer Radio (FFB) 1692 1770 2747 3722 3795 = Boulogne-sur-Mer Radio; Le Portel (Pas-de-Calais); F-62200 BOULOGNE-SUR-MER
MAR	Brest - Le Conquet R (FFU) 1635 1671 1876 2691 2726 3722 = Centre Radiomaritime Brest-Le Conquet; Officer-in-Charge; F-29217 LE CONQUET
MAR	Grasse R (TKM) 1834 2646 2649 3722
MAR	Marseille R (FFM) 1906 2628 3795 = Centre Radiomaritime de Marseille; Mont Rose par la Madrague de Montredon; F-13008 MARSEILLE
MAR	Saint Lys R (FFL/FFS/FFT) **4212.5** 4328 4366 4369 4402 4411 **6320.5** 6421.5 6513 6519 **8420 8424 8425** 8510 8522.5 8550 8767 8791 8800 8806 **12582.5 12605.5** 12678 12912.6 13073 13140 13152 13161 13167 13179 13185 13191 **16810.5 16821 16831.5** 16947.6 17027 17040.8 17251 17254 17296 17305 17323 17338 17365 17368 19791 **22378** 22509 22688 22705 22738 22771 22786 22798 = France Telecom; Service Commercial Radiomaritime; Centre Radiomaritime de Saint-Lys; Le Chef de Centre; F-31470 SAINT-LYS
MAR	Saint Nazaire R (FFO) 1686 1722 2586 2737 2740 3792 3795 = DTRE Services Radioelectriques; Centre Radiomaritime; L'Inspecteur Central; F-44480 SAINT-NAZAIRE-DONGES

MIL	FA Metz (FAC 20) 5308
MIL	FA Mont-Valerien (FAV 22) 3881 6825
MIL	FF Ajaccio ('RFFHCA') **5121 6976**
MIL	FF Bordeaux ('RFFE') **9212 9363.5**
MIL	FF Marseille ('RFFH') **7420 7614**
MIL	MOD Paris = Ministere de la Defense; Etat-Major des Armees; Chef; 14 Rue Saint-Dominique; F-75997 PARIS Armees ('RFFA') **5071.7 5879.7 6890.2 7606.7 7822.2 8063.2 9076.7 9983.7 10177.7 10393.7 10470.2 10950.2 10967.7 13465.2 13593.7 13839.7 13886.7 13940.7 13977.7 13986.7 14598.2 15627.7 15699.7 16077.7 16165.2 16280.2 16310.2 17468.2 18013.7 18293.7 18380.2 19048.7 19418.7** ('RFFP') **3628.7 3803.2 3832.7 4765.2 5397.7 7642.7 7937.7 9907.7 10960.7 11518.2 13479.7 14487.2** ('RFFX') **8105 8510.7 11025 13572.5 15861.7**
MOI	CRS Chalons sur Marne (FIS 351) 4529
MOI	CRS Chartres (FIS 328) 4529
MOI	CRS Laval (FIS 353) 4585
MOI	CRS Lyon (FIS 369) 5365
MOI	CRS Metz (FIS 357) 4529
MOI	CRS Nancy (FIS 354) 4529
MOI	CRS Nanterre (FIS 392) 5033
MOI	Gap Prefecture (FIT 5) **5164.5**
MOI	Metz Prefecture (FIT 57) **5164.5**
MOI	Orleans Prefecture (FIT 45) **5164.5**
MOI	Tours Prefecture (FIT 37) **5164.5**
NAV	FN Brest (FUE) **2789 4334** = Marine Nationale Francaise; Poste Emetteur; Arsenal Maritime; F-29240 BREST-Naval
NAV	FN Lorient (FUN) 3330
NAV	FN Paris (HWN) **4295 6348 8453 12140 17180** = Ministere de la Defense; Marine Nationale Francaise; Division T.E.R.; Secretariat EMM/OPS/TRANS; Bureau "Transmissions"; Etat-Major de la Marine; 2 Rue Royale; F-75200 PARIS-Naval
NAV	FN Toulon (FUO) **2607 6385** = Marine Nationale; Region Maritime Mediterranee; Service Transmissions; Veille du Littoral; Commandement du Service TVL; F-83800 TOULON-Naval
POL	Rosny sur Bois Gendarmerie (FVA 80) 5779 **14613.7**
PTT	DTRE Paris = Direction des Telecommunications des Reseaux Exterieurs; Immeuble DTRE Bercy; M. l'Ingenieur en Chef; 246 Rue de Bercy; F-75584 PARIS Cedex 12
XXX	AHE Lyon 5426 **7911** 8185 **8186.3 10161.5**
XXX	PSF Paris **18895**

GABON

GAB / TR / 64500-64599 / FO / 91B4

AIR	ASECNA Libreville (TRK) **3544.5** = Representation de l'ASECNA; Chef Maintenance; BP 2252; LIBREVILLE
DIP	Algerian E Libreville **18944.5**
MAR	Libreville R (TRA) 2586 = (reception reports to TIG Libreville)
MIL	FF Libreville ('RFTJD') **7542.7 9126.7 11043.7 13543.7 16324.7 20813.7** ('RFTJDA') **10364**
PTT	TIG Libreville = Societe Gabonaise des Telecommunications; BP 4069; LIBREVILLE

GAMBIA

GMB / C5 / 61700-61749 / GB / 89B5

AIR	Banjul Air = Department of Civil Aviation; Directorate; Yundum International Airport; POB 285; BANJUL

MAR	Banjul R (C5G) 2752 2755 3750 3763 4069 8441 8806 13042.5 = (reception reports to GAMTEL Banjul)
PTT	GAMTEL Banjul = Gambia Telecommunications Co Ltd; POB 387; BANJUL

GEORGIA

GEO / 4L / see Russian Federation / UG / 44E5

IRC	ICRC Tbilisi **13966.5**
MAR	Batumi R (UFA) 2310 2800 3630 4357 8752 13089 17329 22732 (UHK) 4295 6360 6410 8546 8695 12935 17137 17190.5 **22684**
MAR	Sukhumi R (UFF) **2464**

GERMANY

D / DA-DR Y2-Y9 / 10000-10999 / ED ET / 62D4

AF	GAF Geilenkirchen (DHN 66) 4742 6754 6762.5 11270.5
AF	GAF Landsberg (DHO 23) 5687
AF	GAF Münster (DHM 91) 3143 5717 6715 11217 = Luftwaffenleitgruppe Nord; Leitfunkstelle; Postfach 51 40; D-48029 Münster
AF	USAF Ramstein AFB (AJK) 6712
CG	GCG Cuxhaven **2840.7** = Küstenwachzentrum Nordsee; D-27478 CUXHAVEN [telefax ++49 4721 106404]
CG	GCG Neustadt **3029.7** = Küstenwachzentrum Ostsee; D-23730 NEUSTADT (telefax +49 4561 16447]
CY	Klingenfuss Publications; Hagenloher Str 14; D-72070 TÜBINGEN [telefax ++49 7071 600849, *http://ourworld.compuserve.com/homepages/Klingenfuss/* E-Mail 101550.514@compuserve.com]
DIP	Egyptian E Bonn **9111.7** = Ägyptische Botschaft; Kronprinzenstr. 1; D-53173 BONN [telefax ++49 228 364304]
DIP	MFA Bonn (DMK) **10554 11459 11537 11540 12130 13375.5 13507.5 13511.5 14614.5 14663.5 15856.5 15858.5 16017.5 17518.5 17520.5 18289.5 18291.5 18345 19226 20020 20062.5 20420.5** = Bundesmysterium des Auswärtigen; Fernmeldeabteilung; Adenauerallee 99-103; Postfach 11 48; D-53001 BONN [telefax ++49 228 173402]
DIP	Polish E Cologne **5774 9132 9914 12125** = Polnische Botschaft; Lindenallee 7; D-50968 COLOGNE [telefax ++49 221 343089]
DIP	Romanian E Bonn **8028** = Rumänische Botschaft; Verteidungsattaché; Legionsweg 14; D-53117 BONN
DIP	Swiss E Bonn (HBD 64) **5752.5** = Schweizerische Botschaft; Gotenstr. 156; D-53175 BONN [telefax ++49 228 8100819]
DIP	Turkish E Bonn **14959** = Türkische Botschaft; Utestr. 57; D-53179 BONN [telefax ++49 228 348877]
IRC	DRK Berlin (DEK 23) **6998.5**
IRC	DRK Düsseldorf (DEK 26) **6998.5**
IRC	DRK Hamburg (DEK 30) **6998.5**
IRC	ICRC Bonn (DEK 88) **6998.5** = [telefax ++49 2225 882271]
MAR	Norddeich R (DAN) **2727 6320 8423.5 12586.5 16836 22391** = Küstenfunkstelle Norddeich Radio; Öffentlichkeitsarbeit; Norddeicher Str. 10; Postfach 11 90; D-26491 NORDEN
MET	Grengel Meteo (DHJ/DHM/DHN) **2195.5** *2342.5* **2592 2690.7 2822** *4570.5* **4903 4922.5 5083 5269** = Amt für Wehrgeophysik; Mont Royal; D-56841 TRABEN-TRARBACH
MET	Hamburg Meteo (DD) **147.3** *3855* **4583 7646** *7880* **11039 11638** *13882.5* **14467.3** = (reception reports to Offenbach Meteo)
MET	Offenbach Meteo = Deutscher Wetterdienst; Zentralamt; Fernmeldeabteilung; Frankfurter Strasse 135; Postfach 10 04 65; D-63004 OFFENBACH [telefax ++49 69 80622801; *http://www.dwd.de/*]
MOI	Berlin **2295.9 5023.8 6338.6**
MOI	BKA Wiesbaden (DEB) **4535.5**

MOI Düsseldorf **3273**

MOI Erfurt **3851.3**

MOI Hamburg **4588 4972.4**

MOI Kiel **4971.7**

MOI MOI Bonn (DER) **2234.5 2235.5 2293.9 2386 2387.7 2442 2442.7 2673.3 2674 2768.5 2769.5 2770.2 4443 4444 4615 4618.3 4619 4620 4971.1 4976.3 4977.3 4978 4979.7 5023.5 5262.8 5264.5 5265.2** = Bundesmysterium des Innern; Graurheindorfer Str. 198; Postfach 17 02 90; D-53108 BONN [telefax ++49 228 6814665]

MOI München **5023.2**

MOI Stuttgart **5024.5**

NAV GN Wilhelmshaven (DHJ 59) 4154.5 6727 6731 6779 10192.5 = Marinefernmeldegruppe 21; Radiostation DHJ 59; Admiral-Zimmermann-Kaserne; D-26380 WILHELMSHAVEN

POL BGS Bonn **7898**

POL BGS München (DEL) **4018**

POL BGS Rosenheim (DEL 60) **4018**

PRS PIAB Bonn (DF) **7916 9361.9 13438.6 13570.9 14458.5 16017.4 18704.2** = Propaganda- und Intrigen-Anstalt dieser eurer Bankrottregierung; D-53000 BONN

PTT BMPT Bonn (DCF 49) **129.1**

TSF Mainflingen TS (DCF 77) 77.5 = Physikalisch-Technische Bundesanstalt; Laboratorium 1.21; Station DCF77; Bundesallee 100; D-38116 BRAUNSCHWEIG

XXX BNDVB Bonn ('6XM8') **5840 9209 12276 13419 15688 17387 18275**

XXX Bonn (DER 50) 5208

GHANA

GHA / 9G / 65400-65499 / DG / 89J8

AIR Accra Air Civil Aviation Authority; Director; POB 87; Kotoka International Airport; ACCRA

DIP Algerian E Accra **18944.5**

MAR Tema R = Ghana Telecom Co Ltd; Coast Radio Station; Chief Radio Officer; POB 32; ACCRA
(9GX) 1674 4381 6480 6504 8696 8791 12968 13140 16920 17305
(9GP) 12995 16902 22694

GIBRALTAR

GIB / see United Kingdom / 08495-08499 / LX / 76P10

AF RAF Gibraltar (MLU) 9031 11234 11247 = Royal Air Force Radio; FS Communications Flight; BFPO 52; GIBRALTAR

NAV RN Gibraltar (GYU) **4221 5229 6371 7770 7813 8625.9 10272.5 10346 10446.5 10470 10615.5 10853 11086.5 11155.5 12325 12824 13448.7 13473 13525.5 13824.5 14535.5 14690.5 16277 17108 20475** = Joint Communications Centre; Fleet Chief Supervisor; HM Naval Base Gibraltar; BFPO 52; LONDON; United Kingdom

GREECE

GRC / J4 SV-SZ / 16600-16799 / LG / 82E6

AIR Athens Air = Ministry of Transport and Communications; Civil Aviation Authority; POB 73751; GR-16604 HELLINIKO

CY DYNACOM Athens **12395**

DIP Egyptian E Athens **11431.7**

DIP German E Athens **11538.3 13375.5 13511.5**

DIP Hungarian E Athens (HGX 22) **12264.5**

DIP Polish E Athens **13446 13877**

DIP Swedish E Athens (SAM 20) **14405.9**

DIP Swiss E Athens (HBD 23) **13961.5**

DIP	Turkish E Athens **10433**
MAR	Athens R (various call signs) 1695 1767 2590 4223 4239.4 4343 4393 4399 4426 4429 **6321.5** 6344 6411 6444.5 6478.7 6501 6507 **8423** 8424 *8530* 8536.5 8681 8687 8692.5 8704 8716 8722 8734 8740 8743 8758 8773 8776 **12603.5** 12720 12833 12859 13029 13047 13080 13095 13110 13134 13170 13194 **16830.5** 16966 16981.5 16995 17094.8 17188 17194.4 17251 17266 17290 17305 17314 17317 17326 17341 17359 17389 17404 19779 22387.5 22471.5 22500 22589.5 22595.7 22679 22720 22723 22744 22750 22765 22786 22792 22807 25011 25401 25431.5 25535 26163 26166 = (reception reports to HTO Athens)
MAR	Chios R, GRC (SVX) 1638 1659
MAR	Iraklion R (SVH) 1725 1740 = (reception reports to HTO Athens)
MAR	Kerkyra R (SVK) 1696 2607 2830 3613 = (reception reports to HTO Athens)
MAR	Limnos R (SVL) 2730 3793
MAR	Rhodes R (SVR) 1824 2624 3630 = Rhodos Radio SVN; O.T.E. Paraktion Kentron; Radiopikonion Rodoy; GR- RHODOS
MET	Athens Meteo (SWA) *8105* = Ministry of Defense; General Air Staff; Hellenic National Meteorological Service; Director; POB 73502; GR-16603 HELLINIKON [telefax + +30 1 9628952 or + +30 1 9649646]
NAV	GN Khania (SXH) 3678
NAV	GN Piraeus (SXA) 119.5 3651.5 3685 3712 4228 4295 6385 6416 6470 12997 = Hellenic Navy; Radiostation SXA; COMEDEAST W.H.Q.; Commanding Officer; Agia Paraskevi; GR- ATHENS
PTT	HTO Athens = Hellenic Telecommunications Organization SA; Network Department; Radio Division; 15 Stadiou Street; GR- ATHENS 124
XXX	BNDVB Athens **11133**

GREENLAND

GRL / see Denmark / 04200-04399 / BG / 48

AF	USAF Thule AFB (XPH) 4724 6739 8968 11217 11220 11244 13200 17976 = (reception reports to ITT; FELEC Services Inc; Lead Operator; BMWS Box 5; APO NEW YORK, NY 09023; USA)
MAR	Aasiat R (OYR) 2235 2304 3125 3276 3280
MAR	Ammassalik R (OZL) 2250 3250
MAR	Ittoqqorttoormiit R (OXM) 2225
MAR	Nuuk R (OXI) 2116 2210 2225 2400 = (reception reports to GTO Nuuk)
MAR	Qanaaq R (OZW) 3175 3250
MAR	Qaqortoq R (OXF) 2129 2265 = Tele Attaveqaatit; Postboks 504; DK-3920 QAQORTOQ
NAV	DM Groennedal (OVC) 6720 10765 11022.5 11245.5
PTT	GTO Nuuk = Gronlands Tekniske Organisation; Traffic Department; Chief Supervisor; Telestationen; Postbox 1002; DK-3900 NUUK

GRENADA

GRD / J3 / 78956-78959 / TG / 116P5

AIR	Saint George's Air = Ministry of Works, Communication, Public Utilities, Civil Aviation and Energy; Department of Civil Aviation; POB 293; SAINT GEORGE'S

GUADELOUPE AND DEPENDENCIES

GDL / see France / 78890-78904 / TFFA-TFFC TFFG - TFFS / 116N4

GUAM

GUM / see Marianas (Northern) / 91212-91217 / PGA-PGF PGT-PGU / 19L1

AF	USAF Andersen AFB (AIE) 6739 8017.5 8968 9016 11226 13200 = 633 OSS/DOW; Andersen AFB; Unit 14035; Box 51; APO AP 96543-5000; USA

CG	USCG Apra Harbour (NRV) 6501 **8422** 8570 13089 **16806.5 17146.4** = USCG Radio Station; Commanding Officer; Box 149 NCWP; FPO SAN FRANCISCO, CA 96630-1843; USA
NAV	USN Apra Harbour (NPN) *5258 5262* 6501 9278 *10253* 11415 *16027.6 19858 19862 23008* = US Naval Pacific Meteorology and Oceanography Center West; Joint Typhoon Warning Center; Commanding Officer; PSC 489; Box 12; FPO AP 96536-0051; USA [telefax + +671 3446143]

GUATEMALA

GTM / TD TG / 78600-78649 / MG / 115o10

AIR	Ciudad de Guatemala Air = Direccion General de Aeronautica Civil; Aeropuerto Internacional "La Aurora"; Zona 13; CIUDAD DE GUATEMALA

GUIANA (FRENCH)

GUF / see France / 81400-81599 / SO / 117C2

AIR	Cayenne Air = Ministere des Transports; Direction de l'Aeronautique Civile; Chef de la Maintenance Radioelectrique; Aerodrome de Cayenne-Rochambeau; F-97351 MATOURY
MIL	FF Cayenne ('RFLIG') **7643.2 10281.2**

GUINEA

GUI / 3X / 61800-61849 / GU / 89C6

AIR	Conakry Air = Agence de la Navigation Aerienne; BP 3025; CONAKRY
DIP	Cuban E Conakry (CLP 8) **16340 18044**
DIP	Egyptian E Conakry **17464.7**
DIP	French E Conakry ('CNRY') **16159**
MAR	Conakry R (3XC) 1813 2586 2805 6383 = (reception reports to DGT Conakry)
PTT	DGT Conakry = Direction Generale des Telecommunications; CONAKRY

GUINEA-BISSAU

GNB / J5 / 61750-61799 / GG / 89B5

AIR	Bissau Air = Direccao-Geral da Aviacao; Servico da Aeronautica Civil; CP 77; BISSAU
MAR	Bissau R (J5M) 2642 4393 4432 8722 8755 13083 17284 17344

GUYANA

GUY / 8R / 81000-81199 / SY / 117A1

AIR	Georgetown Air = Ministry of Transport; Civil Aviation Department; Oranapai Towers - Wights Lane; Kingston; POB 1006; GEORGETOWN
MAR	Demerara R (8RB) 2555 2558 8449 12709 16947.6 = (reception reports to GUYTELCO Georgetown)
PTT	GUYTELCO Georgetown = Guyana Telecommunication Corp; POB 10628; GEORGETOWN

HAITI

HTI / HH 4V / 78400-78449 / MT / 116H5

AIR	Port-au-Prince Air = Secretairerie d'Etat des Travaux Publics, des Transports et des Communications; Office National de l'Aviation Civile - OFNAC; Aeroport International Francois Duvalier; BP 1346; PORT-AU-PRINCE
MAR	Port-au-Prince R 2738

HAWAII

HWA / see United States of America / 91155-91999 91280-91293 91902-91903 / PH / 114

AF USAF Hickam AFB, Honolulu (AGA) **6715 6739 6830 8964 8968 9016 9057 11181 11226 13200 13242 17973**

AIR Honolulu Air 7607 = Federal Aviation Administration; Honolulu Flight Service Station; Air Traffic Manager; 4204 Diamond Head Road; HONOLULU, HI 96816

CG USCG Honolulu (NMO) 6501 **8416.5** 8764 **12579 12589** 13089 **22376 22472** = USCG Communication Station; Commanding Officer; Wahiawa; HONOLULU, HI 96786-3050 [telefax ++1 808 6284426 or 6284428]

MAR Hoolehua R (KEJ) 2530 **4300** 4435 **6326** 6510 **8431** 8716 **12611.5** 13140 **16842.5** 17365 **19691** 19776 **22398.5** 22834 **26105** 26154 = KEJ Globe Wireless; Engineering Department; 1 Meyn Road; POB 56; HALF MOON BAY, CA 94019; USA [telefax ++1 415 7268604; *http://www.globewireless.com/*]

MET Honolulu Meteo (KVM 70) *9982.5 11090 16135 23331* = U.S. Department of Commerce; National Oceanic and Atmospheric Administration; National Weather Service Pacific Region; Communications Manager; 737 Bishop Street # 2200; Box 50027; HONOLULU, HI 96850-4993 [telefax ++1 808 5411678; *http://www.nws.noaa.gov/pr/os/pacfax.htm*]

NAV USN Pearl Harbour (NPM) *4855* 7801.5 7930 9396 *21785* = Naval Pacific Meteorology and Oceanography Center; Fleet Liaison Division; Fleet Services Officer; POB 113; PEARL HARBOUR, HI 96860-5050 [telefax ++1 808 4748902]

TSF Kihei TS, Maui Island (WWVH) 2500 5000 10000 15000 = Department of Commerce; National Bureau of Standards; Station WWVH; Engineer-in-Charge; POB 417; Kekeha; KAUAI, HI 96752

HONDURAS

HND / HQ-HR / 78700-78724 / MH / 105L2

AIR Tegucigalpa Air = Direccion General de Aeronautica Civil; Departemento de Operaciones; Aeropuerto Internacional Toncontin; Apartado T-245; TEGUCIGALPA

HONG KONG

HKG / see United Kingdom / 45000-45010 45030-45040 / VH / 23A10

AF RAF Kai Tak (GFH) **14608 14705**

AIR Kai Tak Air = Civil Aviation Department; Acting Chief; United Centre, 10th Floor; 95 Queensway; HONG KONG

MAR Victoria Harbour R (VRX) 2060 4232.5 4387 4405 **6322.5** 6510 6519 **8421.5 8424.5** 8539 8543 8584 8619 8749 8812 **12585.5 12591** 13020.4 13031 13044 13167 13194 **16821 16831** 16987 17096 17192 17350 17389 **22379** 22536 22744 22816 = (reception reports to HKTI Hong Kong)

MET Victoria Harbour Meteo *16904.3*

PTT HKTI Hong Kong (ZEN) **14985** = Hong Kong Telecom International Ltd; 39/F Hong Kong Telecom Tower; 979 King's Road; Quarry Bay; HONG KONG

HUNGARY

HNG / HA HG / 12700-12999 / LH / 81D3

AIR Budapest Air = Ministry of Transport; General Directorate of Civil Aviation; Pf. 53; H-1675 BUDAPEST

DIP French E Budapest ('D2Z') **9227 11037 11050**

DIP MFA Budapest (HGX 21) **5478.5 6780.2 6793 9256.7 12262.5 13876.2 14840.5 15675.8 16453.5 18040.5 20045** = Ministry of Foreign Affairs; Telecommunications Department; Pf. 423; H-1394 BUDAPEST

DIP Romanian E Budapest **7458 7471.4**

PRS MTI Budapest (HG) **9114 17468** = Magyar Tavirati Iroda; Fem u. 5-7; H-101. BUDAPEST

ICELAND

ISL / TF / 04000-04199 / BI / 50

AIR	Reykjavik Air = Directorate of Civil Aviation; POB 350; IS-121 REYKJAVIK
MAR	Hornafjoerdur R (TFT) 1659 1862 4372
MAR	Isafjoerdur R (TFZ) 1862 2724
MAR	Neskaupstadur R (TFM) 1761 2700
MAR	Reykjavik R (TFA) 1650 1770 1876 1890 4372 4396 4402 4411 6501 6507 8731 8737 8743 8809 13092 13098 13119 13134 17257 17284 17314 17329 19758 19773 19794 22768 22771 = (reception reports to PTT Gufunes)
MAR	Siglufjoerdur R (TFX) 1755 1883 2600 4396 4402
MAR	Vestmannaeyjar R (TFV) 1713 2628
NAV	USN Keflavik (NRK) *3820.5 9318 18486*
PTT	PTT Gufunes = Gufunes Telecommunications Centre; Station Manager; POB 270; IS-121 REYKJAVIK [telefax ++354 1 629043]

INDIA

IND / AT-AW VT-VW 8T-8Y / 42000-43399 / VA VE VI VO / 27M5

AIR	Calcutta Air (AWC) **3177.5** = Civil Aviation Department; Calcutta Region; Office of the Regional Director; Assistant Communications Officer; R-463 B New Quarters; Calcutta Airport; CALCUTTA 700 052
AIR	Delhi Air = Civil Aviation Department; Office of the Regional Director; Aeronautical Communication Station; Director; Delhi Airport; Palam; NEW DELHI 110 010
AIR	Madras Air = National Airport Authority; Senior Communications Officer; Madras Airport; MADRAS 27
AIR	Mumbai Air = Civil Aviation Department; Aeronautical Communications Station; Controller of Communications; Santacruz International Airport; MUMBAI 400 057
DIP	Egyptian E Delhi **17464.7 19046.7**
DIP	Indonesian E Delhi **19057**
DIP	MFA Delhi (8WD) **12104 17541.8**
DIP	Pakistan E Delhi **10891.7 16386.7**
DIP	Polish E Delhi **16274 17411**
DIP	Swedish E Delhi (SAM 61) **18688**
DIP	Swiss E Delhi (HBD 22) **18284.6**
MAR	Calcutta R (VWC) 2003.5 4286 8526 12745.5 = Calcutta Radio; Alipore Observatory; CALCUTTA
MAR	Cochin R (VWN) 2085
MAR	Goa R (VWG) 2047.5
MAR	Kandla R (VWK) 2037.5
MAR	Madras R (VWM) 2042.5 4301 8674.4 8722 12718.5 13125 16975 = P. & T.; Madras Radio VWM; Tiruvottiyur; MADRAS 600 019
MAR	Mangalore R (VWL) 2037.5
MAR	Mumbai R (VWB) 2003.5 4316 8514 8630 8755 12710 12966 13104 17034 22551 = Coastal Radio Station VWB; Mumbai Telephone District; Chief Radio Operator; MUMBAI
MAR	Paradwip R (VWY) 2097
MAR	Port Blair R (VWP) 2037.5
MAR	Tuticorin R (VWT) 2003.5
MAR	Vishakhapatnam R (VWV) 2097 8510
MET	Delhi Meteo (ATP/VVD) **4060 7580 12075 19400** = Indian Meteorological Department; Office of the Director General of Meteorology; Mausam Upagrah Bhavan; Logi Road; NEW DELHI 110 003 [telefax ++91 11 699216]
NAV	IN Cochin (VTN) 12730
NAV	IN Mumbai (VTF/VTG/VTH/'RBSL') 2072 4268 4283 **4336.5 6365 6386.5 6467 8298 8500 8566 8634 12808.5 12849 12903 16922 16938 17132 22628.5** = Naval Communications Centre; Officer-in-charge; Shahid Bhagat Singh Road; MUMBAI 400 001
NAV	IN Port Blair (VTR) 8518 16862
NAV	IN Tuticorin (VTK) 8590 13430

NAV	IN Vishakhapatnam = (VTO/VTP/'RBSLV') 2295 4238 4283 6386.5 6418 8566 8646 9298.5 12521 12840 13530
PRS	PTI Delhi = The Press Trust of India Ltd; Coordinator Sat Project; PTI Building; 4 Parliament Street; NEW DELHI 110 001
PTT	Ministry of Communications; Department of Telecommunications; Sanchar Bhavan; 20 Ashoka Road; NEW DELHI 110 001
TSF	Delhi TS (ATA) 5000 10000 15000 = National Physical Laboratory; Time and Frequency Division; Assistant Director; Hillside Road; NEW DELHI 110 012 Delhi
XXX	Jogindarnagar 6952.5
XXX	Port Blair 6952.5

INDONESIA

INS / JZ PK-PO YB-YH 7A-7I 8A-8I / 96000-96299 96500-97999 / WA WI WP WR /17H13

AIR	Jakarta Air = Direktorat Telekomunikasi, Navigasi Udara dan Listrik; Gedung Operasi Pelabuhan Udara Kemayoran; Sub Directorate of Telecommunication Facilities; Head; Jalan Angkasa 8; Kemayoran; POB 3109; JAKARTA
CY	ARCO Bontang **9311**
CY	KODECO KE5 Platform **9944**
CY	PERTAMINA Samarinda **9311**
DIP	Algerian E Jakarta (7RQ 50) **19031.5**
DIP	Egyptian E Jakarta **9216.7**
DIP	MFA Jakarta **14501.5 18391.5 18411.7 18508.8 18801.5 19106.5 19117.5 19755 20401.5**
DIP	Slovak E Jakarta **14401**
DIP	Swedish E Jakarta (SAM 58) **18187.5**
MAR	Amboina R (PKE) 2690 4295 4378 8473 8794 12682.5 13104 17184.8
MAR	Balikpapan R (PKN) 2690 4357 6499.9 6510 8705.4 8746 12715
MAR	Banjarmasin R (PKG) 3180 4238 4387 6337 6504 6510 8457 8764 12690 13110
MAR	Belawan R (PKB) 3180 4295 6510 8686 8746 12970.5 13077 17239.7 = (reception reports to Jakarta R)
MAR	Bitung R (PKM) 2690 6428.5 6510 8694 8806 12704.5 13104 = (reception reports to Jakarta R)
MAR	Dili R (PKT) 2690 8806
MAR	Dumai R (PKP) 3180 4357 6337 6510 8457 8764 12682.5 13101 17184.8
MAR	Jakarta R (PKX) 2690 6501 8542 8752 12970.5 13104 17239.7 17269 22575.5 22795 = Jakarta Radio PKX; c/o Departemen Perhubungan; Direktorat Jenderal Perhubungan Laut; Head of Marine Electronics & Telecommunications Division; Medan Merdeka Timur No. 5; JAKARTA
MAR	Jayapura R (PNK) 3180 4357 6510 8694 8800 12682.5 13110 17074.4 = (reception reports to Jakarta R)
MAR	Kupang R (PKK) 6510 8445 8794
MAR	Merak R (PKQ) 8626
MAR	Palembang R (PKC) 2690 4295 4396 6491.5 6510 8705.4 8806 = Stasion Radio Pantai; Palembang Radio PKC; PALEMBANG
MAR	Panjang R (PKC 4) 2690 6355 6504 8806
MAR	Pontianak R (PKS) 3180 4408 6355 6510 6513 8473
MAR	Sabang R (PKA) 3180 4387 6513 8686 8794 17184.8
MAR	Samarinda R (PKN 6) 3180 6374.5 6510 8445 8800
MAR	Semarang R (PKR) 3180 6499.9 6510 8461 8800 = (reception reports to Jakarta R)
MAR	Surabaya R (PKD) 2690 6504 8461 8794 12704.5 13110 17239.7 = Surabaja Radio PKD; Setasiun Radio Perum TEL; Jebel Ketintant I568; SURABAYA
MAR	Tarakan R (PKO) 3180 8445
MAR	Teluk Bayur R (PKP 2) 3180 6355 6513 8694
MAR	Ujung Pandang R (PKF) 2690 4295 4396 6510 8686 8800 12682.5 13077 = (reception reports to Jakarta R)

NAV	IN Belawan (7CB) 9946 12235 16225 18982
NAV	IN Jakarta (8AA) 11060 12065.5 **17616.5** 20775
XXX	Ambon 10451.7
XXX	Bitung 7650
XXX	Gorontalo 10445
XXX	Kendari 10451.7
XXX	Manado 7405
XXX	Palembang 10445
XXX	Sonder 10445

INTERNATIONAL CIVIL AVIATION ORGANIZATION

- / 4Y / - / - / -

IRAN

IRN / EP-EQ 9B-9D / 40700-40899 / OI / 32

AIR	Tehran Air = Civil Aviation Organization; International Affairs and Air Transport; Mehrabad International Airport; POB 11365-8315; TEHRAN
CY	MARINET Tehran **6993.6**
DIP	Austrian E Tehran (OEC ..) **14478.5**
DIP	Czech E Tehran ('2D6') **14385**
DIP	Hungarian E Tehran (HGX 42) **18040.9**
DIP	Indian E Tehran (8WB 4) **16372**
DIP	Italian E Tehran **16023**
DIP	Polish E Tehran **14903**
DIP	Turkish E Tehran **14959**
MAR	Abbas R (EQI) 8469 12700
MAR	Anzali R (EQL) 3247.5 4262 6355 8534
MAR	Bushire R (EQM) 3202 4349 4369 6425 8698 8746 12700
MAR	Chah Bahar R (EQJ) 4360 8725 12870
MAR	Khomeini R (EQN) 4282 8497 8797 12690
MAR	Nowshahr R (EQO) 4262 4387 6355 8534 8767
MET	Tehran Meteo (9DM) **10686 17553**

IRAQ

IRQ / HN YI / 40600-40699 / OR / 34H5

AIR	Baghdad Air = State Organization of Iraqi Civil Aviation; Al-Fourat Avenue; POB 6179; Saddam International Airport; BAGHDAD
DIP	Algerian E Baghdad **18529.5**
DIP	Bulgarian E Baghdad **13416.3**
DIP	Egyptian E Baghdad **10156.7 11486.7**
DIP	Cuban E Baghdad (CLP 67) **20120**
DIP	Czech E Baghdad ('7A1') **18420**
DIP	Polish E Baghdad **14639**
DIP	Serbian E Baghdad **16268**
IRC	ICRC Baghdad **13974.2**
MAR	Basrah R (YIR) 8440 12660 16906 = Transmission Engineer; Basrah Control Radio YIR; Iraqi Ports Administration; BASRAH
PRS	INA Baghdad (YIL/YIX) **5867 7565 10162.5 14699** = Iraqi News Agency; Adu Nawwas Street; BAGHDAD

IRELAND

IRL / EI-EJ / 03950-03999 / EI / 59

AF	IAF Dublin ('0A') **2461.5 3451.5 4601.5** 5708
AIR	Shannon Air **3250 8145** = Shannon Airadio; Ballygireen; NEWMARKET-ON-FERGUS, Co Claire
MAR	Malin Head R (EJM) 1644 1677

MAR	Valentia R (EJK) 1746 1752 = Valentia Radio; Officer in Charge; VALENTIA ISLAND, Co Kerry

ISRAEL

ISR / 4X 4Z / 40150-40199 / LL / 34B6

AIR	Ben Gurion Air = Israel Airports Authority; POB 137; IL-70100 BEN GURION INTERNATIONAL AIRPORT
DIP	Austrian E Tel Aviv (OEC 44) 14478.5
DIP	French E Tel Aviv 14545
DIP	Italian E Tel Aviv 18123
DIP	Norwegian E Tel Aviv 16104
DIP	Polish E Tel Aviv 16223
DIP	Romanian E Tel Aviv 16322
DIP	Serbian E Tel Aviv 16346
DIP	Swedish E Tel Aviv (SAM 52) 15821.9
DIP	Swiss E Tel Aviv (HBD 25) 5773 16118
MAR	Elat R (4XA) 2649 2656 3656 3765
MAR	Haifa R (4XO) 2649 3656 4366 4384 4408 4423 6507 6510 8719 8731 8752 8797 13086 13095 13119 13185 17266 17290 19776 22705 22714 22744 26157 = Coast Station Haifa Radio 4XO; Manager; Palyam Street 21; IL- HAIFA
NAV	IN Haifa (4XZ) 2680 2800 4241 4331 4442 6379 8437 10046 11548 12984 15013 16034 17050 = Haifa Naval Radio 4XZ; Communications Officer; Navy Base; IL- HAIFA
XXX	MOSSAD Tel Aviv ('CJL') 14781.5 15721.5 16339.5 ('C37A') 7569.5 7572.5 7573.5 7578.5 8652.5 9797.5 10348 10749.5 11434.5 12224.5 13073.5 14379.5 14386.5 14390.5 15477.5 16312.5 18557.5 20456.5 21818.5 ('M4W') 16129 ('TFB') 12179.8

ITALY

I / I / 16000-16595 / LI / 77

AF	IAF Bari (INY) 11270.5
AF	IAF Brindisi (ILI) 5685
AF	IAF Martina Franca 4726 4729 5685 5798 6740 6743 6997 8400
AF	IAF Monte Venda 5685
AF	IAF Pisa 6743 6748 17976
AF	IAF Rome = Aeronautica Militare Italiana; Ispettorato Telecomunicazioni e Assistenzia al Volo; 1. Reparto "Servizio Controllo Spazio Aereo e Informazioni Aeronautiche"; Piazzale degli Archivi 34-36; I-00144 ROME (IBC) 11356 (-) 5685 6740 8992
AF	IAF Sigonella 6730
AF	many IAF stations 3158
AF	many SAR stations 6737
AF	USAF Aviano (AJK 33) 5714 6865
AF	USAF Vicenza (IBH) 4873.5
AIR	Rome Air = Aeronautica Militare Italiana; Ispettorato Telecomunicazioni e Assistenzia al Volo; 2. Reparto "Traffico Aereo"; Piazzale degli Archivi 34-36; I-00144 ROME
DIP	Austrian E Rome (OEC 61) 7893.5
DIP	Egyptian E Rome 6841.7 6856.7 7789.7 14613.7 16171.7
DIP	Hungarian E Rome (HGX 23) 12264.5
DIP	MFA Rome 7449.5 8131.5 8180.5 9085.5 9087.5 9090.5 9296 10191 10557.5 11480 12118 12150 17431.5 19876 20167.5
DIP	Polish E Rome 10388
DIP	Swiss E Rome (HBD 54) 9166.5

MAR	Ancona R (IPA) 2656
MAR	Augusta R (IQA) 1662 1776 2628 3635 = Augusta Radio IQA; Via Adua 2; I-96011 AUGUSTA [telefax ++39 931 978844]
MAR	Bari R (IPB) 2579 = Amministrazione delle Poste e delle Telecomunicazioni; Ufficio Principale Radio PT; Strada Adriatica Sud nr. 76/C; I-70100 BARI
MAR	Cagliari R (IDC) 1716 1771 2680 = IRITEL; Stazione Radio Costiera; Viale Guglielmo Marconi 185; I-09131 CAGLIARI
MAR	CIRM Rome (IRM) 4342 6365 8685 12748 12760 17105 22525 = Centro Internazionale Radio Medico; Via Architettura 41; I-00144 ROME
MAR	Civitavecchia R (IPD) 1773 1888 2710 2782 = Stazione Costera "Civitavecchia Radio"; Via G. Bruno 11; Palazzo PTT; I-00053 CIVITAVECCHIA
MAR	CP Gaeta **6476.7**
MAR	CP Marsala 3340
MAR	Crotone R (IPC) 1764 2663 = IRITEL; Stazione Radio Costiera; Via Capocolonna; I-88074 CROTONE
MAR	Genova R (ICB) 2642 2722 = Genova Radio ICB; Ufficio Principale Radio PT; Il Direttore; Via San Benedetto 14; I-16126 GENOVA [telefax ++39 10 265097]
MAR	Lampedusa R (IQN) 1656 1876
MAR	Livorno R (IPL) 1761 1925 2040 2458 2591 = Ufficio Principale Radio PT; Centro Stazione Radio Costiera; Via della Navi 12; I-57100 LIVORNO [telefax ++39 586 889641]
MAR	Mazara del Vallo R (IQQ) 1782 2211 2600 = IRITEL; Stazione Radio Costiera; Via Castelvetrano 217; I-91026 MAZARO DEL VALLO
MAR	Messina R (IDF) 2789 = IRITEL; Stazione Radio Costiera; Ufficio Interurbano; Corso Cavour; I-98122 MESSINA
MAR	Napoli R (IQH) 1785 2632 3735 = Stazione Radio Costera; Calata San Marco 13; I-80133 NAPOLI [telefax ++39 81 5512048]
MAR	Palermo R (IPP) 1650 1852 = Stazione Radio Costiera; Via Riccardo Wagner 8; I-90139 PALERMO [telefax ++39 91 584643]
MAR	Porto Torres R (IZN) 1806 2719 3642 = Ufficio Principale Radio PT; I-07046 PORTO TORRES
MAR	Rome R (IAR) **4210.5** **4216.5** 4292 4320 4354 4360 4378 4381 4390 4414 4423 4435 6409.5 6418 6504 6510 **8418** **8423** **8426** 8530 8649.5 8656 8670 8713 8734 8758 8773 8776 8785 8794 8809 **12602.5** 12996 13011 13015.5 13089 13092 13101 13107 13113 13128 13164 13182 **16820** **16823** 17005 17160.8 17206.1 17248 17257 17263 17281 17287 17311 17377 19767 22628.5 22630.5 22699 22726 22741 22762 22804 22825 26160 = Stazione Radio Costera PT; Roma Radio; Rep. Ricevente; P.le Giulio Douhet 25; I-00143 ROME [telefax ++39 6 59614277]
MAR	San Benedetto del Tronto R (IQP) 1855
MAR	Trieste R (IQX) 2624 = Ufficio Principale Radio PT Trieste; Il Direttore; Palazzo della Marineria; Passeggio San Andrea 4; I-34121 TRIESTE [telefax ++39 40 308375]
MET	Rome Meteo (IMB) **3172.5** *4777.5* **5887.5** *8146.6* **11453** *13597.4* = Italian Meteorological Service; Telecommunications Department; 2. Ufficio - Regolamentazione; Il Capo Ufficio; Piazzale degli Archivi 34/36; I-00144 ROME
MIL	IA Rome (IEA 20) **7596** 7598
MIL	IA Torino (IEA 21) 4490 **4492.2**
MIL	I IFOR Rome ('LEONE') 3240 10233.3
MOI	IFG Rome (IER 20) **5160** **11541**
NAV	IN Ancona (ICA) 2350.5 3331.5 4144 6815
NAV	IN Augusta (IGJ) **2806** 4168.5 **4227** 5270 5714 6288 **6333.5** 6335.5 **8151** 8302.5
NAV	IN Brindisi (ICE) 4154.5 5270 6880 8400
NAV	IN Cagliari 6815
NAV	IN Catania 6815
NAV	IN La Maddalena (ICH) 4168.5
NAV	IN La Spezia (ICS) 5270 6873.5
NAV	IN Lipari (IDW) 6815
NAV	IN Marina di Carrara 6815

NAV IN Mazara del Vallo 6815
NAV IN Messina 6815
NAV IN Napoli (ICN) 5270
NAV IN Pantelleria 4168.5 8302.5
NAV IN Rome (ID) 118.5 2291 2815 4214 4280 4721 5270 6318 6390 6733 6760 8429.5 8486 9210 12594 = Radio Marina Militare; Commanding Officer; Via della Storta 701; I-00123 ROME
NAV IN Taranto (ICT) 4154.5 5270 8314.5 8326
NAV IN Trapani (ICT) 6815
NAV IN Venezia (ICZ) 6815
NAV USN Napoli (IBA) 4873.5 8017.5
PTT ITALCABLE Rome = Servizi Cablografici, Radiotelegrafici e Radioelettrici SPA; Via Calabria 46-48; I-00187 ROME
XXX SISMI Udine ('WJI') **14447 16217 17526**

IVORY COAST

CTI / TU / 65526-65599 / DI / 89F7

AIR ASECNA Abidjan = ASECNA; Representation en Cote d'Ivoire; Departement de l' Infrastructure Radioelectrique; BP 918; ABIDJAN 15
MAR Abidjan F R 2416 2650 4366 6504 8734 13110
MAR Abidjan R (TUA) 2586 4343 4411 6507 8465 8782 13060.5 13089 16947.8 17341 22768 = (reception reports to PTT Abidjan)
MIL FF Port Bouet ('RFTJF') **6978.7 10493.7 10956.7**
PTT PTT Abidjan = Office des Postes et Telecommunications de la Republique de Cote d'Ivoire; Centre Recepteur de Marcory; Le Chef de Centre; ABIDJAN

JAMAICA

JMC / 6Y / 78387-78399 / MK / 116M2

AIR Kingston Air = Civil Aviation Department; 9 Trinidad Terrace; POB 4000; KINGSTON 5
MAR Kingston R (6YI) 2587 2590 3535 4369 4402 6470.5 6513 8465 8752 13065 13146 16947.6 = (reception reports to JAMINTEL Kingston)
PTT JAMINTEL Kingston = Jamaica International Telecommunications Limited; Supervisor; 15 North Street; POB 138; KINGSTON

JAPAN

J / JA-JS 7J-7N 8J-8N / 47200-47999 / RJ RO / 20

AF USAF Yokota (AIF) 4724 6739 8968 13200 15016 17976
AIR Tokyo Air = New Tokyo International Airport; Aviation Weather Service Center; Liaison Officer; Japan Meteorological Agency; 133 Aza Komomae Furugome; NARITA CITY, Chiba Prefecture
IP INTERPOL Tokyo (JPA) **14707 14817.5 18756**
MAR Choshi R (JC/JDC) 4225 4349 6467 6485 8479 8647.5 8653.6 8686 12687 12826.5 12878 13054 16998.5 17043.2 17112.6 17166.5 22463 22636.5 22669.5 = Choshi Radio; Kobatakeshinmachi 7756; CHOSHI-CITY
MAR Funabashi F R (JFA) 4390 8800 13134 17293 22723 = Chuo Radio; Central Fishering Coast Station; 21-20-3 Futawahigashi; FUNABASHI CITY, Chiba 274
MAR Kagoshima F R (JFX) 8690 12704.5 22642
MAR Kobe R (JCK) 4332.5
MAR Misaki F R (JFC) 8616 22599
MAR Nagasaki R (JDB/JO) 4328 6457.5 6491.5 8463 8523.4 8706 12673.5 13008 13063 13069.5 16933.2 17093 17215 17220.5 22646.5 22659.5 22690.5 = Nippon Telegram and Telephone Public Corp; Coastal Station Nagasaki Radio; 14-1 Hinode-cho; ISAHAYA-CITY, Nagasaki 854
MAR Naha R (JCX) 6470 12667.5 = Naha Radio; Nippon Telegraph and Telephone Public Corp; Director; 1-14-1 Sobe; NAHA 900, Okinawa
MAR Shizuokaken F R (JFG) 22606.5

MAR Tokyo R (JBO) 4375 4408 4429 4432 8746 8752 8758 8776 13095 13098 13110 13128 17251 17257 17266 17335 22717 22774 22801 22813 = (reception reports to KDD Tokyo)

MAR many F R stations (JF.) 12832.5 12858 16976.8 17014 17132 17231

MET Tokyo Meteo (JM) 122.7 *3365 3622.5* 4298 *5405* 6397 *7305* 8526 *9438 9970* 12840 *13597 14692.5* 17029 *18220 18441.2 23522.9* = Ministry of Transport; Japan Meteorological Agency; Synoptic Reporting Division; Chief of Section; 3-4 Ote-machi 1-chome; Chiyoda-ku; TOKYO 100 [telefax ++81 3 32112032]

NAV JN Tokyo (JNA) 4276 4305.5 4354 6519 8419.5 8492 8571 8707 8710 12942 13076.5 13173 13179 16911 17052.5 17395 17401 19764 19767 22576.5 22648.5 22822 22825 = Japan Maritime Safety Agency; Chief Communications Officer; 1-3 Kasumigaseki 2-chome; Chiyoda-ku; TOKYO 100

NAV USN Totsuka (NDT) *4967 12777*

PRS KYODO Tokyo (JJC) *4316 8467.5 12745.5 16971 17069.5 22542* = Kyodo News Service; Facsimile News Desk; International Department; Deputy Chief; 2-2-5, Toranomon; Minato-ku; TOKYO 105 [telefax ++81 3 35862485]

PTT KDD Tokyo = Kokusai Denshin Denwa Co Ltd; KDD Building; 3-2 Nishi-Shinjuku 2-chome; Shinjuku-ku; POB 1; TOKYO 163

TSF Tokyo TS (JJY) 5000 8000 10000 = Ministry of Posts and Telecommunications; Radio Research Laboratories; Frequency Standard Division; 4-1-3 Midori-cho; Koganei 184; TOKYO

XXX RRL Tokyo (JJD) 10415 15950

JOHNSTON ISLAND

JON / see United States of America / 91275 / PJ / 122K6

JORDAN

JOR / JY / 40250-40349 / OJ / 34D7

AIR Amman Air = Amman Airport; AFTN Com Centre; Supervisor; AMMAN

AIR RJ Amman (JYJ) 9003 13225

DIP Algerian E Amman **18529.5**

DIP Austrian E Amman (OEC ..) **14478.5**

DIP Egyptian E Amman **10016.7 13347.7**

DIP Romanian E Amman **14521 16325**

DIP Swiss E Amman (HBD 71) **13958.5**

MAR Aqaba R (JYO) 2570 2590 4240 4414 6390 8474 8528 8544 8728 8761 12930.5 13005 13134 13149 16910 17275 22695.5 22696 = (reception reports to PTT Amman)

PRS PETRA Amman (JYF) **5055 6830 14560** = PETRA; Jordan News Agency; POB 6845; AMMAN

PTT PTT Amman = Telecommunications Corp; POB 1689; AMMAN

KAZAKHSTAN

KAZ / UN-UQ / 28679-36003 / UA / 43D4

AIR Aktyubinsk Air 6730

MET Almaty Meteo (RCW/RXA) *5325 9927.5*

KENYA

KEN / 5Y-5Z / 63612-63820 / HK / 93G5

AIR Nairobi Air (5YD) **7423 8165 13366.5 13373.5 13737.3** = Office of the Director General of Civil Aviation; POB 30163; NAIROBI

DIP Egyptian E Nairobi **10172.7**

DIP Polish E Nairobi **16428 19608**

IRC ICRC Nairobi (5ZR 88) **13541 13974.2 13998**

MAR	Mombasa R (5ZF) 2595 4396 8441.4 8782 13065 17175.2 = Mombasa Radio; c/o Kenya External Telecommunications Company Ltd; Extelcom House; Branch Engineer; Nyerere Avenue; POB 80160; MOMBASA
MET	Nairobi Meteo (5YE) **7461** ***7465*** **9041** ***9045*** **10384.6 16183** ***16187*** **17441.5** ***17445.5*** = Ministry of Transport and Communications; Kenya Meteorological Department; Office of the Director of Meteorological Services; Directorate; Dagoretti Corner, Ngong Road; POB 30259; NAIROBI [telefax 00254 2 567888 or 567889]

KERGUELEN ISLANDS

KER / see France / - / - / 26R16

PTT	DTRE Port-aux-Francais (FJY 2) 9250.7 10112 14438.2 19532 20113 = (reception reports to DTRE Paris, F)

KIRIBATI

KIR / T3 / 91484-91491 91533 91600-91629 / NGA-NGB NGM-NGU PLC-PLF PLUR / 9B5

AIR	Bairiki Air = Ministry of Communications; Directorate of Civil Aviation; Secretary of Communications; POB 72; BAIRIKI, Tarawa Atoll
MAR	Takaronga R, Tarawa Atoll (T3C) 2117 4387 8758 = (reception reports to PTT Bairiki)
MOI	MILIPI Bairiki, Tarawa Atoll (T3F 6) 7678
MOI	MILIPI Kiritimati 6200
MOI	MILIPI Tabuaeran (T3L 3) 3200 6200
MOI	MILIPI Teraina (T3L 4) 3200 6200
MOI	MOH Bairiki, Tarawa Atoll (T3G 2) 7312
PTT	PTT Bairiki, Tarawa Atoll (T3T) 8143.5 17442 18301 = Ministry of Communications; POB 72; BAIRIKI, Tarawa Atoll
PTT	PTT Kiritimati (T3L) 17442 19216.5
PTT	PTT Tabuaeran 8143.5
PTT	PTT Teraina 8143.5
XXX	CM Kiritimati (T3F 9) 7301
XXX	CM Tabuaeran 7301
XXX	CM Teraina 7301
XXX	PWD Bairiki, Tarawa Atoll (T3T 5) 7490

KOREA (REPUBLIC OF)

KOR / DS-DT D7-D9 HL 6K-6N / 47080-47199 / RK / 21E9

AIR	Soul Air = Ministry of Transportation; Civil Aviation Bureau; Kimpo International Airport; SOUL 150 01
MAR	Cheju R 2091 2299 2433 2583
MAR	Gangreung R (HLK) 2050 2091 2433 2836
MAR	Inchon R (HLC) 2050 2091 2284 2385 2433
MAR	Kunsan R (HLN) 2091 2433 2508 2583
MAR	Mokp'o R (HLM) 2091 2357 2583
MAR	Pusan R (HLP) 2050 2091 2433 2460 2699 4235
MAR	Soul R (HLF/HLG/HLJ/HLO/HLS/HLW/HLX) 4308 4357 6451 6513 8473 8484 8497 8577 8636 8725 8797 12712 12727 12843 12916.5 12923 12935 13113 13161 16910 16990 17079 17118 17130 17341 17350 22482 22611.5
MAR	Taeha-dong R, Ullung do Island (HLU) 2009 2091 2433 2583
MAR	Yosu R (HLY) 2044 2091 2583
MET	Soul Meteo (HLL) 5810 *5857.5* 5912.7 *7433.5* 11620 11645 = Korea Meteorological Administration; System Operation Division; Director; 1 Songwol-Dong; Chongno-gu; SOUL 110-101 [telefax + +82 2 7380924]
PRS	YONHAP Soul (6MK) *11602.5* 14930 17548.5 = Yonhap News Agency; Director of Transmissions; 98-5 Uni-Dong; Chongro-Ku; POB 1039; SOUL

TSF Taejon TS (HLA) 2500 5000 = Korea Standards Research Institute; Time and Electromagnetics Standards Laboratory; Taedok Science Town; POB 3; TAEJON 300-31

UNO UNNNSC Pan Mun Jom **15938**

KOREA (UNDEMOCRATIC PEOPLE'S REPUBLIC OF) KRE / HM P5-P9 / 47000-47079 / ZK / 21D7

AIR Pyongyang Air = Civil Aviation Administration; Directorate General; Sunan District; PYONGYANG

DIP Indonesian E Pyongyang **18411.5**

DIP MFA Pyongyang **10590 16243.6 16251 16406 16875 17228.7**

MAR Namp'o R (HML) 6479 8529 16959

MAR Pyongyang R (HMZ) 6475.5 8664 12674

PRS KCNA Pyongyang (HMF) **8020 8152 9395 10524 10580 11430** *11476* **11536 12175** *13580* **13780 14452 14568 15633** = (reception reports to PTT Pyongyang) or [telefax + +850 2 812421, *http://www.kimsoft.com/kcna.htm*]

PTT PTT Pyongyang = Ministry of Communications; Department of International Relations; Korean Central Wireless Station; Oesong-Dong; Central District; PYONGYANG

KUWAIT KWT / 9K / 40550-40599 / OK / 34P9

AIR Safat Air = Directorate General of Civil Aviation; Kuwait International Airport; POB 17; SAFAT

DIP Egyptian E Safat **13347.7 15016.7 15926.7**

DIP Hungarian E Safat (HGX ..) **18040.9**

MAR Safat R (9KK) 2200 2750 2765 4299 4411 4429 6381 6504 6513 8525 8737 8743 12895 12925 13146 13155 16995 17296 17305 22504 22705 22741 = (reception reports to PTT Safat)

PTT PTT Safat = Ministry of Communications; Chief Radio Engineer; SAFAT

KYRGYZSTAN KGZ / EX / 36900-38999 / UAF / 43K6

LAOS LAO / XW / 48921-48959 / VL / 25G3

AIR Vientiane Air = Ministere de la Defense Nationale; Direction de l'Aviation Civile; 2 Chemin Pang Kham; BP 119; VIENTIANE

DIP Hungarian E Vientiane (HGX 38) **18040.9**

PRS KPL Vientiane **14639**

LATVIA LVA / YL / see Russian Federation / EV / 46E2

AIR Riga Air 6617

MAR Liepaja R (UPW) 12865 16949

MAR Riga R
(YLN) 8545
(YLQ) 1855 **2460 2535** 2605 3185 3202.5 **4218.5** 4236 **4335** 4357 **6325 6341.5** 6368.5 6386.5 6405 **8421 8432** 8446 8506 8615 8752 **12579.5 12671.5 12688.5** 12840 12895 13070 13089 13161 13179 **16824.5 16955** 16997 **17181** 17311 17329 19738.5 22455 22586.5 22786 22849

MAR Ventspils R (UNI) 2670 3180 3202.5 4320 4335 6341.5 8600

LEBANON LBN / OD / 40100-40149 / OL / 34C4

AIR	Beirut Air = Telecommunications Services; Chief; Beirut International Airport; BEIRUT
DIP	Polish E Beirut **11151**
DIP	Slovak E Beirut **12210**
MAR	Beirut R (ODR) 8702 4432 2641 8800 13122 = (reception reports to OGERO Beirut)
MIL	FF Naqoura ('RFFXL') **8031 10412 13848.5 14578**
POL	Beirut Gendarmerie (FVI 90) **14613.7**
PTT	OGERO Beirut = Organisme de Gestion et d'Exploitation des installations et des equipements de l'ex-Societe Radio Orient; Ingenieur du Centre de Emission; BP 1226; BEIRUT
UNO	Norwegian UNIFIL Naqoura (LBL 1) 13543 13545.3

LESOTHO LSO / 7P / 68454 / FX / 95L5

AIR	Maseru Air = Department of Civil Aviation; POB 629; MASERU 100

LIBERIA LBR / A8 D5 EL 5L-5M 6Z / 65600-65699 / GL / 89D8

AIR	Monrovia Air = Roberts International Airport; Telecommunications Department; POB 1; MONROVIA
MAR	Cape Palmas R (ELZ) 4323.6 8606 12995.3 16930.8
MAR	Harbel R (ELH) 4240 8600 8800
MAR	Monrovia R (ELC) 8518 12709 16983 17146.4 22491
UNO	UNO Monrovia **14405**

LIBYA LBY / 5A / 62000-62299 / HL / 85B6

AIR	Tripoli Air (5AF) **11494.6 18388.6** = Department of Civil Aviation; Director of Technical Services; Tripoli International Airport; TRIPOLI
CY	Seismic-1 ('S1') **7909.7**
CY	Seismic-2 ('S2') **7909.7**
CY	Tripoli **7909.7**
DIP	Bulgarian E Tripoli **10242**
DIP	Czech E Tripoli **14478**
DIP	Egyptian E Tripoli **10391.7 13505.7 15889.7**
DIP	Hungarian E Tripoli (HGX 62) **15676.2**
DIP	Italian E Tripoli **10886**
DIP	Polish E Tripoli **13917 16246**
DIP	Romanian E Tripoli **16055**
DIP	Turkish E Tripoli **16206**
MAR	Benghazi R (5AB) 2513 2816 4420 6513 8450 8803 12660 13167 17299 22795 = Benghazi Radio 5AB; Maritime Radiotelegraph Station; Telecommunications Department; POB 9464; BENGHAZI
MAR	Tobruk Coast Station; Radio Officer; POB 44; TOBRUK
MAR	Tripoli R (5AT) 2197 2320 2418 4411 4429 6501 6507 8515 8770 12680 13083 17272 22732
PRS	JANA Tripoli **12186 14573 15462 20560** = Jamahiriyah News Agency; Technical Department; POB 2303; TRIPOLI

LIECHTENSTEIN LIE / see Switzerland / 06990 / LSXB / 66P3

LITHUANIA

LTU / LY / 26500-26799 / EY / 46E2

DIP German E Vilnius **11540**
MAR Klaipeda R = Klaipeda Radio; POB 673; 235815 KLAIPEDA (LYK) **3210** 4229 4369 **6427 6439 6475** 8473 8541 8701 8752 12703 12854 **12895** 13089 17050 17134 (LYL) 3215 **3730** 6375 6493.5 8541 8570 8617 8725 **12815** 12899 13098 17138 17311 17320 19782 22636.5

LUXEMBOURG

LUX / LX / 06580-06599 / EL / 61o7

AIR Luxembourg Air = Ministere des Transports; Service Aeronautique; 19-21 Boulevard Royal; L-2910 LUXEMBOURG

MACAU

MAC / see Portugal / 45011-45020 / VM / 23F7

MACEDONIA

MKD / Z3 / see Serbia / LW / 82E3

UNO UNO Podgorica ('HCMP') **6475**

MADAGASCAR

MDG / 5R-5S 6X / 67009-67199 / FMM-FMS / 95A2

AIR ASECNA Antananarivo (5ST) **4012.2** 5362 7722.5 **7831.5 9195** = ASECNA; Representation de Madagascar; Service Meteorologique; Ingenieur en Chef de la Navigation Aerienne; BP 46; ANTANANARIVO
AIR Morondava Air (5SV) 7722.5
DIP French E Antananarivo ('TNNR') **17384 17398**
MAR Antalaha R 2663 4360
MAR Antsiranana R (5RL) 2712 4399
MAR Mahajanga R (5RO) 2579 4360
MAR Maintirano R 2712 4399
MAR Manakara Sud R 2579 4360
MAR Mananjary R 2652
MAR Morondava R 2652 4372
MAR Nosy Be R (5RN) 2652 4372
MAR Toamasina R (5RS) 2733 4232.5 4286.9 4372 6348 6430.4 6510 6513 8465 8573.9 8737 8809 12697.8 12860.8 13092 13149 16930.4 17147.9 17335 17350 22490 22813
MAR Tolanaro R (5RD) 2712 4372
MAR Toliara R (5RT) 2579 4399
MET Antananarivo Meteo (5ST) **3558 7552.5 17400**

MADEIRA

MDR / see Portugal / 08521-08524 / see Portugal / 96o6

AF PAF Porto Santo 8992
MAR Funchal R (CUB) 2810 2843 4432 8755 26166 = (reception reports to CPRM Funchal)
NAV PN Porto Santo
(CTQ) 2657
('RPTMB') **10367**
PTT CPRM Funchal = Companhia Portuguesa Radio Marconi; Estacao do Madeira; O Garante de Funchal; Avenida Arriaga 7 e 9; P-9000 FUNCHAL

MALAWI

MWI / 7Q / 67421-67797 / FW / 92F7

AIR	Lilongwe Air = Chief Civil Aviation Officer; Private Bag 322; LILONGWE 3

MALAYSIA

MLA / 9M 9W / 48600-48679 96400-96499 / WBB WBF-WBK WM / 18

AIR	Kuala Lumpur Air = Department of Civil Aviation; Aeronautical Mobile Service; Operations Manager; KL International Airport; 47200 SUBANG
MAR	Georgetown R, Pinang Island (9MG) 2680 2790 4228 4337 4399 4405 4414 4429 6355.9 6470.5 6501 8492 8595.5 8698 8719 8770 8809 12678 12831 12943.5 13107 16815.5 17045.6 17272 22786 = Syarikat Telekom Malaysia Berhad; Stesen Pantai Penerimaan; Radio Telegraph Master; Bahagian Antarabangsa; Kuala Muda; 13110 PENANG
MAR	Kota Kinabalu R, Sabah (9WH) 2605 2816 4254 4384 4423 6449 6495.4 6513 8454.8 8619 8737 8755 = Sabah Port Authority; Wisma Pelabuhan; Jalan Tun Fuad; Tanjung Lipat; 88617 KOTA KINABALU [telefax + +60 88 223036]
MAR	Kuching R, Sarawak (9WW 20) 2130 2628 2842 4294 4325 4363 4393 6372 6452 6507 8522 8552 8746 8803 = Kuching Port Authority; POB 530; 93710 KUCHING [telefax + +60 82 481696]
MAR	Miri R, Sarawak (9WW 21) 1980 2660
NAV	MN Georgetown, Pinang Island (9MB) 4239 5064 6481 12781.5 16950
NAV	MN Johor Baharu (9MR) **3159 8192 11570 16299.5 16930.4**

MALDIVES

MLD / 8Q / 43500-43599 / VR / 27L9

AIR	Male Air = Civil Aviation Authority; Dhoshimeynaa Building; Ameer Ahmed Magu; MALE 20-05
MAR	Male R (8Q2) 4378 4432 6501 8737 8803 13158 13167 17281 17356 22759 22804

MALI

MLI / TZ / 61200-61399 / GA / 89G4

AIR	ASECNA Bamako = Representation de l'ASECNA; BP 36; BAMAKO
DIP	Egyptian E Bamako **15541.7**

MALTA

MLT / 9H / 16596-16599 / LM / 83Y19

MAR	Valetta R (9HD) 2625 4223.5 8441.4 8812 12709.2 13173

MARIANAS (NORTHERN)

MRA / see United States of America / 91218-91232 / PGR-PGS / 17o8

MARION ISLAND

MRN / see South Africa (Republic of) / 68994 / FAME / 26A14

MARSHALL ISLANDS

MHL / V7 / 91250-91258 91364-91378 / PK / 9A2

MAR	Majuro R (KUP 65) 2616 2724

MARTINIQUE

MRT / see France / 78915-78929 / TFFD-TFFF / 116L4

AIR Fort de France Air = Direction Regionale de l'Aviation Civile aux Antilles et en Guyane; BP 644; F-97262 FORT DE FRANCE

MAR Fort de France R (FFP) 2545 = (reception reports to DTRE Fort de France)

MIL FF Fort de France ('RFLI') **5705.7 6771.7 6936.7 7896.7 10521.7 10798.3 11110.5 11541.7 14626.7 15961.7 16143.7 19101.7 19216.7** = (reception reports to FN Paris, France)

NAV FN Fort de France (FUF) **4232 8478.5 13031.2 16961.5 22537** = (reception reports to FN Paris, France)

PTT DTRE Fort de France = Centre Radioelectrique; Le Chef de Centre Exploitation; BP 604; F-97621 FORT DE FRANCE

MAURITANIA

MTN / 5T / 61400-61599 / GQ / 89B1

AIR ASECNA Nouadhibou = ASECNA; Chef Station 5TX/GQPPYFY; BP 6; Aerodrome; NOUADHIBOU

AIR ASECNA Nouakchott = ASECNA; Representation au Mauritanie; BP 205; NOUAKCHOTT

DIP Algerian E Nouakchott **19141.2**

MAR Nouadhibou R (5TA) 1881 2652 8572 = Compagnie Radio Maritime; BP 50; NOUADHIBOU

UNO UNO Basikounou **10175 13907.5**

UNO UNO Nouakchott **10175**

MAURITIUS

MAU / 3B / 61974-61995 / FIMM FIMP / 26T11

AIR Plaisance Air (3BZ) **4023.5** 5731 8028 **9378.5** = Department of Civil Aviation; Principal Engineer; Plaisance International Airport; PLAINE MAGNIEN

CG MCG Port Louis 8336

MAR Port Louis Harbour R (3BB) 4139 8800

MAR Port Louis R (3BM) 4282 8554 12831 16978.4 22587 = Telecommunications Authority; Ex-Telecommunications Headquarters Building; Edith Cavell Street; PORT LOUIS

MET Agalega Islands Meteo 3650 5820 8233 10100 12433

MET Saint Brandon Meteo 3650 5820 8233 10100 12433

MET Vacoas Meteo (3BT) **3188** 3650 5820 **7693** 8233 10100 12433 = Prime Minister's Office; External Communications; Meteorological Department Headquarters; Bigara Meteorological Station; The Observatory; Route Saint Paul; VACOAS

MAYOTTE ISLAND

MYT / see France / 67005 / FMCZ / 95B2

MAR Dzaoudzi R (FJN) 2663

MET Dzaoudzi Meteo (FXD) 3464 7542 10432

MIL FF Dzaoudzi ('RFVITT') **7586**

MEXICO

MEX / XA-XI 4A-4C 6D-6J / 76000-76999 / MM / 115

AIR Merida Air = SENEAM; Jefe del Departemento de Radio; Calle 49 No. 560 y 78 y 80; MERIDA

AIR Mexico City Air = Oficina de Servicios de Informacion Aeronautica; Departemento de Operaciones; Nueva Torre de Control; Bulevar Puerto Aereo 485; Delegacion Venustiano Carranza 15500; MEXICO CITY

DIP Swedish E Mexico City (SAM ..) **14354.9**

MAR Acapulco R (XFA) 2431 2470 2600 4292 4363 6414.5 8514 8743 12752 13140 16935.5 17251 22465 22768

MAR Chetumal R (XFP) 2270 2320 2725 4292 4366 4393 6439 6501 6507 8595.5 8767 12843 13101 17251
MAR Ciudad del Carmen R (XFB) 2270 2542 2722 4307.5 6435 6501 8562.5 8743 12675 13101
MAR Coatzacoalcos R (XFF) 2270 2542 2655
MAR Cozumel R (XFC) 2270 2542 2802 4268 4363 4378 6390 6507 6510 8580.5 8743 12824 13149 17281 = (reception reports to DGT Mexico City)
MAR Ensenada R (XFE) 2470 2560 2725 4307.5 4393 6390 6510 8562 8794 13006.5 13140 16927.5
MAR Guaymas R (XFY) 2431 2470 2710 4271 4366 6435 6501 8613 8803 12815 13101
MAR La Paz R (XFK) 2431 2560 2665 4268 4366 6350 6507 8505 8767 12675 13140 17251 22795
MAR Manzanilla R (XFM) 2431 2470 2685 4225 4366 6354 6501 8568.5 8767 12829.5 13101 17251 = Estacion Costera XFM; Jefe; Apartado 293; MANZANILLO, Col.
MAR Mazatlan R (XFL) 2470 2560 2805 4250 4378 6484.5 8470 8794 12703 13149 17115.5
MAR Mexico City R (XDA) 8567 8575.5 8626 8794 8803 12740 12836 12855 13014.5 13101 13149 16914.5 16942.5 17120.5 17140 17251 17281 22471 22516 22768 22795
MAR Progreso R (XFN) 2320 2542 2725 4225 4366 6358 8621 8803 12729 13143 17134 17290 22511
MAR Salina Cruz R (XFQ) 2431 2560 2745 4268 4366 6360 6501 8631 8767 12708 13149
MAR Tampico R (XFS) 2270 2320 2756
MAR Veracruz R (XFU) 2270 2320 2805 4285 4393 6367 8656 8803 12775 22477
PTT DGT Mexico City = Direccion General de Telecomunicaciones; Direccion de Operacion Central; Departemento de Comunicaciones Radioelectricas; Oficina de Operaciones de Estaciones Fijas; Avenida Lazaro Cardenas 567; 03028 MEXICO CITY

MICRONESIA FSM / V6 / 91203 91317-91356 91408-91434 / PT / 17N10

AIR Pohnpei Air = National Air Weather Service Office; POHNPEI
MAR Colonia R, Yap (KUP 69) 2616 2724
MAR Kolonia R, Pohnpei (KUP 66) 2616 2724
MAR Moen R, Truk (KUP 67) 2616 2724

MIDWAY ISLAND MDW / see United States of America / 91066 / PM / 122V2

MOLDAVIA MDA / ER / 33700-33899 / LU / 81L3

MONACO MCO / 3A / - / LN / 71L9

MAR Monte Carlo R (3AC) 4363 4393 6504 8701.5 8728 8743 13070 13083 13146 13188 17192 17260 17275 19776 22550 22750 22768 22846 = Monte Carlo Radio; 1 Chemin du Fort Antoine; MC-98000 MONTE CARLO

MONGOLIA MNG / JT-JV / 44200-44399 / ZM / 22

DIP MFA Ulan Bator (JTF 23) 14586

MONTSERRAT MSR / see United Kingdom / - / TR / 116N6

MOROCCO

MRC / CN 5C-5G / 60100-60349 / GM GS / 88H7

AIR	Casablanca Air = C.N.C. SA; BP 5239; CASABLANCA-Maarif
AIR	Rabat Air = Ministere des Transports; Avenue Ma-El-Aynayne; BP 759; AGDAL-RABAT
DIP	Egyptian E Rabat **14501.7 18751.7**
DIP	French E Rabat ('J5W') **11042 13542 13547** ('RBAT') **16289 16589**
DIP	Japanese E Rabat **9280.7**
DIP	Polish E Rabat **13957 13975**
DIP	Romanian E Rabat **18352**
DIP	Swiss E Rabat (HBD 52) **13965.5**
MAR	Agadir R (CND) 1911 2593 = Agadir Radio CND; BP 810; AGADIR
MAR	Casablanca R (CNP) 2586 2663 8686 8800 12695.5 13143 17170.4 17353 = Centre Radioelectrique de Casablanca-Radio CNP; Le Chef du Centre Radiotelegrafique; CASABLANCA-BOURGOGNE
MAR	Safi R (CND 3) 1743 2635
MAR	Tanger R (CNW) 1911 2635 = (reception reports to ONPT Rabat)
PRS	MAP Rabat (CNM) **10213.1 13585.9 18220.9 18265 18496.1** = Maghreb Arabe Presse; Le Chef d'Exploitation; Rue Ibn Aicha; BP 1049 RP; RABAT
PTT	ONPT Rabat = Office National des Postes et Telecommunications; Direction des Telecommunications; Le Chef du Service des Transmissions; 6 Rue Oqbah (Agdal); RABAT

MOZAMBIQUE

MOZ / C8-C9 / 67200-67399 / FQ / 84H8

AIR	Maputo Air = Secretaria de Estado da Aeronautica Civil; Divisao de Intercambio Aeronautico; Alameda do Aeroporto; CP 227; MAPUTO
CY	ADM Rio Matola **13380.2**
CY	LOMAC Maputo **14600**
DIP	Cuban E Maputo (CLP 25) **19089**
MAR	Maputo R (C9L 2) 2575 4289 8698 13056 = (reception reports to PTT Maputo)
MAR	Mocambique R (C9L 6) 4289 8698 13056 = (reception reports to PTT Maputo)
PTT	PTT Maputo = Telecomunicacoes de Mocambique; CP 25; MAPUTO

MYANMAR

MYA / XY-XZ / 48000-48299 / VY / 25

DIP	Indian E Yangon **18725**
MAR	Yangon R (XYR) 4292 8441 8755 12867 13182 17189.6 17326 22699 = (reception reports to PTT Yangon)
PTT	PTT Yangon = Myanmar Posts and Telecommunication; Ground Floor; 125 Pansodan Street; YANGON
XXX	Lashio **7538.6**

NAMIBIA

NMB / V5 / 68006-68312 / FY / 94C4

MAR	Lüderitz R (V5L) 1710 1764 2191 2266 2356 2593 2606 2716 2762 2783
MAR	Walvis Bay R (V5W) 1764 2191 2266 2356 2593 2606 2783 4357 6501 8719

NAURU

NRU / C2 / 91530 / AN / 9A8

AIR	Nauru Air = Department of Civil Aviation; Flight Service Officer; POB 282; NAURU
MAR	Makwa R (C2N) 2201 8686 8767 17194

NEPAL

NPL / 9N / 44400-44499 / VN / 29H3

AIR Kathmandu Air = Ministry of Tourism; Department of Civil Aviation; Engineering Section; Sinamangal; KATHMANDU

NETHERLANDS

NLD / PA-PI / 06200-06399 / EH / 60

AF DAF Valkenburg (PBV) 5705
AIR Amsterdam Air = (reception reports to Rijksluchtvaartdienst; Albert-Plesman-Weg 1-6; NL-25.. DEN HAAG)
CY ADM Den Haag **13380.2**
DIP MFA Den Haag (PCW 1) **9117.5 13415.3 13545.1 18461.5 18646.6 19731.5 23561.5** = Ministry of Foreign Affairs; Postbus 20061; NL-2500 EB DEN HAAG
DIP Polish E Den Haag **7622 9108**
MAR Scheveningen R (PCG/PCH) **1619.5 1674 1713 1716 1890 2600 2824 4217 4250 4369 6504 8428.5 8622 8794 12585 12596.5 12799.5 13095 13113 13131 16826.5 16839 17198.9 17347 17356 19758 22383 22682 22708 22789** = PTT Telecom; Maritime Service Organisation; Scheveningen Radio; QSL Manager; Mr. Rob van Dijck PA0DCK; Merwedestraat 1; Postbus 468; NL-1970 AL Ijmuiden [telefax + +31 2550 62424]
NAV DN Den Helder (PBB) **2845 6483** = Netherlands Navy; Radio Communications Unit; Station PBB; Commanding Officer; NL- DEN HELDER
NAV DN Goeree Island (PBC) **2474 4230 4280 4332 6358.5 6500 6895 8439 8514 8526 12840.5** = (reception reports to Officer in Charge; Netherlands Naval Station; Noraweg 20; NL-2210 AB NOORDWIJKERHOUT)

NETHERLANDS ANTILLES

ATN / PJ / 78985-78994 / TN / 116K8

AIR Curacao Air = Curacao Airadio; Chief Radio Officer; Curacao Airport; WILLEMSTAD, Curacao

NEW CALEDONIA AND DEPENDENCIES

NCL / see France / 78825 91570-91599 / NW / 9B13

AIR Noumea Air = Direction de l'Aviation Civile; BP H1; NOUMEA Cedex
MAR Noumea R (FJP) 2197.5 4366 6496.4 6501 8698 8731 12709 13089 = Noumea Radio; BP 224; NOUMEA
MIL FF Noumea ('RFHI') **8341.7 14606.7 14718.3**
NAV FN Noumea (FUJ) **4271 8646 16958 22461** = Commandement de la Marine Nationale; Service "Transmissions"; Officier des Telecommunications; NOUMEA

NEW ZEALAND

NZL / ZK-ZM / 91997 93000-93999 / NZ / 11

AF RNZAF Auckland (ZKX) 3032 **5442** 5687 8974 8977 8998 9010 9024 11235 **13206 18004**
AIR Auckland Air = Ministry of Transport; Civil Aviation Division; Station Communications Officer; POB 53008; International Airport; AUCKLAND
CG NZCG Auckland 2129
CG NZCG Manukau 2129
CG NZCG Taranaki (ZMH 49) 2045 2444 2480
CG NZCG Tauranga (ZMH 35) 2045
CG NZCG Wellington (ZMH 84) 2129
CG NZCG Whakatane (ZMH 83) 2045
CG NZCG Whitianga (ZMH 48) 2045
MAR Auckland Harbour R 2012 2129 2162

MAR	Awanui R (ZLA) 4211 4384 6513 8417 8752 12580 13146 17350 22801 = ZLA Globe Wireless; Engineering Department; 1 Meyn Road; POB 56; HALF MOON BAY, CA 94019; USA [telefax ++1 415 7268604; *http://www.globewireless.com/*]
MAR	Bluff F R 2045
MAR	Castlepoint R 2045
MAR	Fiordland F R 2444 2480
MAR	Gisborne F R 2480
MAR	Gisborne Harbour R (ZMH 74) 2012 2045 2162
MAR	Great Barrier Island R (ZMH 222) 2045 2444
MAR	Halfmoon Bay F R, Stewart Island 2045 2068
MAR	Houhora R (ZMH 29) 2045 2480
MAR	Kaingaroa F R, Chatham Islands 2104 2480
MAR	Kawhia R 2045 2444
MAR	Leigh R 2444
MAR	Little Barrier Island R 2045
MAR	Lyttelton R 2129
MAR	Mangonui R (ZMH 37) 2480
MAR	Manukau Harbour R 2012
MAR	Marlborough R 2045
MAR	Motueka R (ZMH 33) 2045 2444
MAR	Napier R (ZMH 25) 2045 2444 2480
MAR	Nelson R (ZMH 57) 2045
MAR	New Plymouth Harbour R 2045 2089 2162
MAR	Onehunga Harbour R 2012
MAR	Onerahi Sports R 2045 2089 2129 2480
MAR	Pitt Island R, Chatham Islands 2045
MAR	Port Chalmers R 2045
MAR	Preservation Inlet R (ZMH 203) 2045 2444
MAR	Riverton F R 2045
MAR	Russell R 2089 2480
MAR	Tauranga Port R 2045 2162
MAR	Timaru F R (ZMH 50) 2045
MAR	Tutukaka R (ZMH 44) 2089
MAR	Waikawa F R 2045
MAR	Waitangi F R, Chatham Islands 2104 2480
MAR	Wanganui Harbour R (ZMH 211) 2012 2045 2162
MAR	Wellington Harbour R (ZMH 28) 2012 2045 2089 2129 2444 2480 (the *New Zealand Nautical Almanac* describes the schedule as "The station remains open when the operator is at home", hi)
MAR	Westport R (ZMH 62) 2045
MAR	Whangamata R (ZMH 54) 2045
MAR	Whangaroa R (ZMH 39) 2045 2089 2480
MET	Wellington Meteo (ZKLF) *5807 9459 13550 16340.1* = MetService New Zealand Ltd; Marine Meteorological Officer; POB 1515; PARAPARAUMU BEACH 6450 [telefax ++64 4 2973568]
NAV	RNZN Auckland (ZLM/ZLO/ZLP) 2207 4250 4263.5 6224 6339.5 6436.8 8297 8316 8601.3 8678 12356 12719.8 12943.5 16531 17128.5 17227.6 22631 22658.8 = NAVCOMMSTA Auckland; Telecommunications Supervisor; Systems Manager; HMNZS Philomel; Private Bag 32901; Devonport; AUCKLAND
NAV	USN Christchurch (ZLK) 9215 12120 14700
PTT	GPO Campbell Island (ZLBC) 3246 4601 7890 9950
PTT	GPO Raoul Island, Kermadec Islands (ZME) 3246 4601 7890 9950
PTT	GPO Wellington (ZLZ) 5225
XXX	DOC Auckland (ZKV) 4616
XXX	DOC Rotorua (ZLGC) 2660
XXX	DOC Wellington (ZKG) 4622
XXX	MRS Leeston (ZLJE) 3261
XXX	MRS Tukino (ZKYX) 3345
XXX	NZCD Auckland (ZKNT) 3357 5383 5386

XXX NZCD Christchurch (ZKST) 3360 5386 5407
XXX NZCD Palmerston North (ZKCT) 5383 5386
XXX NZCD Wellington (ZKHQ) 3360 5386 5389

NICARAGUA NCG / HT H6-H7 YN / 78725-78749 / MN / 115L3

AIR Managua Air = Ministerio de Transporte; Director General de Aeronautica Civil; Plaza Espana, Edificio 17; Apartado 4936; MANAGUA J.R.

NIGER NGR / 5U / 61000-61199 / DR / 90C3

AIR ASECNA Niamey (5UA) **5160 7596** = Representation de l'ASECNA; BP 1096; NIAMEY-AEROPORT
DIP Algerian E Niamey **8013.5**
DIP French E Niamey ('NMEY') **15676**

NIGERIA NIG / 5N-5O / 65000-65299 / DN / 90C7

AIR Kano Air = Kano Airadio; Aviation Division; Kano Airport; KANO
AIR Lagos Air (reception reports to Federal Ministry of Transport and Aviation; Civil Aviation Department; Signal Section; Principal Technical Officer; Murtala Muhammed Airport; Private Mail Bag 1038; IKEJA)
DIP Algerian E Lagos **19141.2**
DIP Czech E Lagos ('6C2') **13890**
DIP French E Lagos **14886**
DIP Indonesian E Lagos **18074.5 18451.5 20401.5**
DIP Italian E Lagos **23120**
DIP MFA Lagos **19357**
DIP Polish E Lagos **15792**
DIP Swiss E Lagos (HBD 30) **18284.6**
MAR Lagos R (5OW) 2755 6411 8698 13065.5 17199 = (reception reports to NITEL Lagos)
PTT NITEL Lagos = Nigerian Telecommunications Ltd; QSL Manager; NECOM House 15; Marina POB 173; Private Mail Bag 12742; LAGOS
XXX Lagos 14382

NIUE ISLAND NIU / see New Zealand / 91822-91823 / NI / 10T5

AIR Niue Air = Ministry of Transport; Civil Aviation Division; Aerodrome Superintendent; Hanan International Airport; POB 83; NIUE
MAR Alofa R (ZKN) 2207

NORFOLK ISLAND NFK / see Australia / 94996 / YSNF / 10V10

NORWAY NOR / JW-JX LA-LN 3Y / 01000-01499 / EN / 49G4

AIR Oslo Air = Civil Aviation Administration; Postboks 8124 Dep.; N-0032 OSLO
DIP MFA Oslo **6962 9081.9 9275 11327.5 11437.8 12124 13388 13496 16074 16104 16209.8 18445.5 18487.8 19827**
DIP Romanian E Oslo **16321**
MAR Alesund Radio; Postboks 279; N-6001 ALESUND
MAR Bergen R (LGN) 1653 1728 2667 2670 3631 = Bergen Radio; Hellebakken 30; N-5035 SANDVIKEN

MAR Bodoe R (LGP) 1659 1710 1743 1770 1803 2660 2663 = Bodoe Radio; Postboks 373; N-8001 BODOE
MAR Farsund R (LGZ) 1671 1785 2642 2676 3652
MAR Floroe R (LGL) 1680 1719 2646 2649 3645 = Floroe Radio; Markegata 42; N-6900 FLOROE
MAR Jan Mayen R (LMJ) 1743
MAR Oerlandet R (LFO) 1653 1737 1782 2635 2646 3628
MAR Rogaland R (LF/LG) 1609.5 1611.5 1692 1725 2653 2656 3638 4211.5 4213 4241.5 4363 4375 4381 4432 6318 6432 6507 8418.5 8574 8743 8749 8755 8785 12605 12727.5 13086 13107 13125 13140 13149 13158 16832 17073.9 17251 17254 17260 17296 17299 17326 22402 22473.5 22717 22738 22795 22810 22813 = Rogaland Radio; Postboks 3070; N-4301 SANDNES
MAR Svalbard R, Spitsbergen (LGS) 1731 2656 3645
MAR Tjoeme R (LGT) 1665
MAR Vardoe R (LGV) 1635 1674 1713 1737 2642 2663 2695 3631 3652
NAV NN Stavanger (JWT) 16277
XXX Beacon Sveio (LN2 A) 5471.6 7871.7 10408.6

OMAN OMA / A4 / 41240-41319 / OO / 33L7

AIR Muscat Air = Ministry of Communication; Directorate General of Civil Aviation; Radio Section; POB 204; MUSCAT
DIP Algerian E Muscat 7421.5
MAR Muscat R (A4M) 2604 2607 3742 3745 4233 4366 6510 8445 8788 12675.5 13176 17223.4 17374 = (reception reports to GENTEL Muscat)
PTT GENTEL Muscat = General Telecommunication Organization; Transmission Department; Manager Transmission; POB 3789; Ruwi; MUSCAT

PAKISTAN PAK / AP-AS 6P-6S / 41500-41849 / OP / 31C6

AIR Karachi Air = Civil Aviation Authority; Headquarters; Senior Communications Officer; 19 Liaquat Barracks; KARACHI 4
DIP Egyptian E Islamabad 14821.7
DIP French E Islamabad ('ILMB') 14545 16841
DIP MFA Islamabad 14291.7 14561.7 14990.7 16351.7 16386.7 18021.7 19031.7
MAR Karachi R (ASK) 2352.5 3884.4 4250 4399 4411 4423 6414.5 6510 8658 8670 8694 8725 8743 8770 8809 13024.5 13051.5 13116 13158 13170 17050.4 17156 17275 22774 22813
NAV PN Karachi (AQP) 2457.5 4325 6390 8490 10512 13011 17093.6 = (reception reports to Naval Headquarters; Operations Division; Directorate of Signals; ISLAMABAD)
PTT Pakistan Telegraph and Telephone; Directorate General; Chief Engineer (O/S); KARACHI
XXX TALEBAN Quetta 14365.7

PALAU PLW / T8 / 91408 / PTRO / 19M1

MAR Koror R (KUP 68) 2616 2724

PALMYRA ISLAND PLM / see Kiribati / 91385 / PLPA / 122U7

PANAMA

PNR / HO-HP H3 H8-H9 3E-3F / 78775-78824 / MP / 115o5

AF	USAF Albrook AFB, Balboa (AFH) 4725 6683 6730 6739 8968 11217 13200 13242 13248 15016 18018 = (reception reports to Headquarters 1978 Communications Group / DOJA; Radio Operations Branch; APO MIAMI, FL 34001-6345; USA)
AIR	Panama City Air = Direccion de Aeronautica Civil; Edificio de Diego 98, 1er Piso; Calle 40 y Avenida Balboa; Apartados 7501 y 7615; PANAMA CITY 5
MAR	Panama R (HPP) 2507.7 2740 4275 4338.5 4357 4426 6423.5 6479 6504 8589 8602.5 8767 8773 12583 12699 13049.5 13086 13170 16822.5 17027.5 17232.4 17284 17305 22391.5 22454 22499 22702 22717 = Intelmar Radio HPP; Station Manager; Apartado 659; PANAMA 9A

PAPUA NEW GUINEA

PNG / P2 / 94000-94099 / AY / 15J6

AIR	Milne Bay Air 6724
AIR	Port Moresby Air = Department of Transport and Civil Aviation; Division of Civil Aviation; POB 457; KONEDOBU
MAR	Port Moresby R (P2M) 2201 4247 4381 4405 6351.5 6510 8515 8725 8731 13042 13149 = (reception reports to Post and Telecommunication Corp; Coastal Radio Station Port Moresby Radio; Manager; POB 1378; BOROKO)
MAR	Wewak R (P2W) 4405 6510
MIL	PNGDF Lae (P2A 3) 5746
MIL	PNGDF Port Moresby (P2A 2) 5746 9240
PTT	PTC Goroka (P272 PT) 5430
XXX	many CC stations 4535
XXX	NTM Port Moresby (P28 BM) 6849

PARAGUAY

PRG / ZP / 86000-86299 / SG / 118A8

AIR	Asuncion Air = Ministerio de Defensa Nacional; Direccion General de Aeronautica Civil; Piso 2; Avenida Mariscal Lopez y Vice-Presidente Sanchez; ASUNCION
MAR	Asuncion R (ZPA/ZPB/ZPC/ZPD/ZPK) 4301 4307 4328 4337 4357 6390 6397 6481 8534 8614 8674 8803 12813 12903 12921 12984 13011 13167 17084 17204 17228 17308 22629 22635 = (reception reports to ANTELCO Asuncion)
PTT	ANTELCO Asuncion = Administracion Nacional de Telecomunicaciones; Casilla 2042; ASUNCION

PERU

PRU / OA-OC 4T / 84300-84799 / SP / 117G2

AIR	Lima Air = Corporacion Peruana de Aeropuertos y Aviacion Comercial; Apartado 680; LIMA 100
MAR	Callao R (OBC) 2738 4247 4363 4396 6360 6474 6513 8465 8546 8728 12725 12938 13015.5 13119 17160 17263 22595 22711
MAR	Iquitos R (OBQ) 4325 4390 4396 6474 6500 6513 8546 8749 8806 12795 13015.5 13110 16970 17320 22555 22738
MAR	Mollendo R (OBF) 2638 4260 4375 4396 6351 6474 6510 8490 8546 8749 8797 12815 13015.5 13101 17015 17296 22465 22744
MAR	Paita R (OBY) 2738 4291 4396 4402 6436 6474 6507 8527 8749 8788 12695 13167 16933

PHILIPPINES

PHL / DU-DZ 4D-4I / 98000-98999 / RP / 19L4

AIR	Manila Air = Civil Aeronautical Administration; Manila International Airport 3101; MANILA

MAR	Bacoor R (DZF) 4274 4399 6411 8548 8752 12821.5 12828 13143 = Bacoor Radio; Manager; 408-F Real Street; Pulang-Lupa; Las Pinas; METRO MANILA (DZI) 4336 4381 6335.5 6513 8672 8767 13008 13134 17254 22506
MAR	Bulacan R (DZJ) 4330 4408 8604.3 8660 8752 12906 12990 13077 13170 16870.3 17353 22723 = Microwave Communications Inc; President & General Manager; # 418 Gedisco Centre; 1564 A. Mabini Street; Ermita; POB 946; MANILA [telefax + +63 2 599744] (DZK) 8592 12888.8 17184 17356 22714 (DZM) 12984 13158 13185 13191 17284 17296 (DZO) 4290 4381 6435 6513 8580 8740 8776 12870 13134 13149 17160 17254 22702
MAR	Cagayan R (DXT) 17257
MAR	Cebu R (DYC) 17380 (DYO) 8740 13086 17284 (DYP) 4310 6465 8620 8791 12930
MAR	Davao R (DXF) 13110 17248 22720 (DXR) 17266
MAR	Dumaguete R (DYK) 17320
MAR	Iloilo R (DYV) 4316 4390 6474 8632 8776 12948
MAR	Mandaluyong R (DZA) 6408 8608 8743 8767 12816 13080 22774 (DZE) 4268 6402 8536 12804 16973.4 17072 = Global Communications Philippines; Manager; 283 Shaw Boulevard; Mandaluyong; METRO MANILA
MAR	Manila R (DZD) 8800 13179 17395 22810 (DZH) 4324 6486 8648 12972 (DZW) 4262 6393 8524 12786 17048 (DZZ) 4288 4408 6432 6507 8576 8740 12864 13077 17152 17254 22490
MAR	Navotas R (DZN) 6468 8584 12936 17168 22538
MAR	Novaliches R (DZP) 4278 6417 8556 12833.5 17112
MAR	Pasig R (DZU) 4318 6477 8636 12954
PRS	PNA Manila 6301.5 16777 16788 16798
XXX	Puerto Princesa 10444

PHOENIX ISLANDS PHX / see Kiribati / 91700-91719 / PB-PC / 122K8

PITCAIRN ISLAND PTC / see United Kingdom / 91960 / - / 122U11

MAR	Adamstown R (ZBP) 2162

POLAND POL / HF SN-SR 3Z / 12000-12699 / EP / 62K4

AIR	Warsaw Air = Air Traffic and Airports Administration; Al. Zwrki i Wigury 1A; POB 3; PL-00906 WARSAW 19
DIP	Austrian E Warsaw (OEC 21) 7893.5
DIP	French E Warsaw (SRZ 944) 10704 10711 10718
DIP	Italian E Warsaw 11463
DIP	MFA Warsaw (SNN 299) 4030 4523 4600 5281.3 5427 5433 6769 6814 6984 6985 7465 7484 7622 7766 8134 8156 9108 9225 9320 10135 10281 10297 10314 10387 10850 11120 11447 11467 11471 12173 12228 13421 13872 13877 13988 14359 14678 15652 15679 15746 15757 16109 16345 18050 18060 18064 18174
DIP	Romanian E Warsaw 9987.2

DIP	Swedish E Warsaw (SAM 40) **7603.9 10582.9**
MAR	Gdynia R (SPA/SPC/SPH) **1608.5** 1692 2726 **4213.5** 4272 4319 4337 4360 4372 4423 **6315.5** 6383 6398 6504 **8427.5** 8430 8482 8634 8666.4 8678 8752 8788 **12598** 12721 12826.5 12928 13122 13167 16808 17016 17064 17213.9 17332 17338 22495 22599.5 22711 22720 = (reception reports to PTT Warsaw)
MAR	Szczecin R (SPB/SPE/SPO) 1794 **2829.5** 2831 4306 4331 4366 6376 6459 6510 8557 8746 8806 **12597** 12872 12939 13022 13134 13155 16821 16974 17070 17239.7 17314 **19697.5** 22505 22551 22750 25315 = [telefax + +48 91 340005] (reception reports to PTT Warsaw;)
MAR	Warsaw R (SPW) **4930.5** 4932 **7863.5** 7865 7975 8728 8734 13101 13161 **14654.5** 14656 17260 **18993.5** 18995 22378 22789 = (reception reports to PTT Warsaw)
MAR	Witowo R (SPS) 2639 **2643.5** 2720 4378
MET	Warsaw Meteo (various call signs) **111.3 129.5** = (reception reports to PTT Warsaw)
MIL	IFOR Warsaw 11200
PRS	PAP Warsaw (various call signs) **11423.5 14912.5 18648.5** = (reception reports to PTT Warsaw)
PTT	PTT Warsaw = Panstwowa Agencja Radiokomunikacyjna; Zarzad Krajowy; Ul. M. Kasprzaka 18-20; PL-01211 WARSAW [telefax +48 22 6585155]
XXX	Warsaw (SNG) **8028 10114** (-) **7828**

POLYNESIA (FRENCH) OCE / see France / 78825-78845 91920-91959 / NT / 122M10

AIR	Papeete Air, Tahiti = Direction du Service d'Etat de l'Aviation Civile en Polynesie Francaise; BP 6011; Aeroport Faaa; PAPEETE
MAR	Papeete R, Tahiti (FJA) 1755 2620 2845 4298 4402 8461 8803 17040.8 17254
MIL	FF Papeete, Tahiti ('RFHJ') **7309.7 8001.7 14925.7 18966.7**
NAV	FN Papeete, Tahiti (FUM) **6462 8625 12664.5 16959**

PORTUGAL POR / CQ-CU XX / 08525-08599 / LP / 75

AF	PAF Lisbon (CSE) 8992
AIR	Lisbon Air = Aeroportos e Navegacao Aerea EP; Direccao Geral de Navegacao Aerea; Arruamento C, Edificio 12; Aeroporto de Lisboa; P-1700 LISBON
DIP	Austrian E Lisbon (OEC 72) **14478.5**
DIP	Swiss E Lisbon (HBD 46) **13958.5**
MAR	Lisbon R (CUL) 2582 2693 2780 3601 4393 6504 8707 8722 8755 13083 13095 13194 **16834** 17284 17335 19761 22714 22759 26166 = Estacao Costeira Lisboa Radio CUL; Apartado 213; P-2795 LINDA-A-VELHA
NAV	NATO Lisbon (CTP) 3782 6389 8551.6 12823.5 16986
NAV	PN Apulia (CTN) 2657
NAV	PN Cascais (CTC) 2657
NAV	PN Lisbon = (reception reports to Ministerio da Marinha; Estacao Radionaval "Comandante Nunes Ribeiro"; Central Receptora de Alges; P- 2795 LINDA-A-VELHA) ('RPFN') **6860 7925 9226 11017 13437** ('RPFNG') **4476 5336**
NAV	PN Sagres = Estacao Radionaval CTS; P-8650 VILA DO BISPO (CTS) 2657 ('RPFNSB') **2799**
POL	Guarda Police (CSP 20) **3282.3**
POL	Viseu Police (CSP) **5049.2**

PRINCE EDWARD ISLAND

PEI / see South Africa (Republic of) / - / - / 26B13

PUERTO RICO

PTR / see United States of America / 78514-78535 / TJ / 105J7

AF	USAF AWS Roosevelt Roads, Ceiba *4857 7398* **7784** *7870* **11118** *11122* **13835** *15781* **19359** *19363*
AIR	San Juan Air = San Juan Airport Radio WWA; Aeronautical Radio Inc; Chief of Center Operations; International Airport; SAN JUAN, PR 00913-6648
CG	USCG San Juan (NMR) **11202**
NAV	USN Roosevelt Roads, Ceiba (NAU) **3394**

QATAR

QAT / A7 / 41160-41179 / OT / 33J4

AIR	Doha Air = Civil Aviation Department; POB 3000; DOHA
DIP	Egyptian E Doha **14742.7 14889.7**
MAR	Doha R (A7D) 1849 2601 2768 3673 4216 4231 4316 4381 4423 8421 8473.5 8630 8728 8794 8812 12591 12966.8 13024 13077 13161 13191 16935 17221.4 17317 17368 22777 22798 = (reception reports to QPTC Doha)
PTT	QPTC Doha = Qatar Public Telecommunications Corp; Telegraph & Telematics; Senior Engineer; POB 217; DOHA

REUNION AND DEPENDENCIES

REU / see France / 61968-61984 / FME / 26V14

AIR	Saint Denis Air = Service de l'Aviation Civile; F-97489 SAINT DENIS - Cedex
MAR	Saint Denis R (FFD) 1635 1707 2583 2600 = (reception reports to DTRE Saint Denis)
MET	Europa Island Meteo (FXE) 3464 7542 10432
MET	Glorieuses Islands Meteo (FXZ) 3464 7542 10432
MET	Juan de Nova Meteo (FXJ) 3464 7542 10432
MET	Saint Denis Meteo = Direction de la Meteorologie Nationale; Service Meteorologique de la Reunion; M. l'Ingenieur en Chef de la Meteorologie; BP 4; F-97491 SAINTE-CLOTILDE Cedex [telefax + + 262 921147] (FXR) 3464 7542 10432 12124 (FZ) **4440** ***8176 16335***
MET	Tromelin Meteo (FXT) 3464 7542 10432
MIL	FF Le Port ('RFVI') **7643.7 7946 8330.3 10869.2 10873.7 12190.2 13846.7 14732 14801.7 15980.2 16087.7 20633.7** = (reception reports to FN Paris, France)
NAV	FN Le Port (FUX) **6397 8475.5 8548 12691 13410 16915** = (reception reports to FN Paris, France)
PTT	DTRE Saint Denis = Centre Radioelectrique de la Reunion; Le Chef de Centre; BP 318; F-97400 SAINT DENIS

RODRIGUES

ROD / see Mauritius / 61988 / FIMR / 26B12

AIR	Pointe Corail Air 5731 8028
CG	MCG Port Mathurin 8100
MET	Port Mathurin Meteo 3650 5820 8233 10100 12433

ROMANIA

ROU / YO-YR / 15000-15499 / LR / 81G5

AIR	Bucharest Air = Departementul Aviatiei Civile; Aeroportul Bucuresti/Otopeni; R-BUCHAREST
DIP	Czech E Bucharest **10612**

DIP	French E Bucharest ('A9C') **13549**
DIP	Hungarian E Bucharest (HGX 26) **9256.7**
DIP	MFA Bucharest **3841.1 4857 5147 5253 6816 6820 6824.1 6828 6836.5 7815 8022 8024.1 8028 10180 10452 10477 10485 10493 10858 11420 11425 12107 12207 13460 13462.2 13550 13556 13587 13855 14475 14681 14686 15833 15838 16056 16332 16335 16340 16342 17458 17484 18552 18762 19402 19495 19850 19853**
DIP	Polish E Bucharest **4962 11077**
DIP	Swedish E Bucharest (SAM 37) **11046.9 12227**
DIP	Swiss E Bucharest (HBD 37) **10963**
MAR	Constanta R (YQI) 2748 4323.5 4408 6473.5 6501 8459 8719 12804 13140 16909.7 17037 17278 22792 = Constanta Radio; Directia Navigatiei Maritime; NAVROM; Radio Department; R-8700 CONSTANTA
MET	Bucharest Meteo (YOG/YRR) **4002 4045 5400 5731** = Ministere de l'Agriculture et de la Sylviculture; Institut de Meteorologie et d'Hydrologie; Service des Transmissions; Sos. Bucuresti-Ploiesti 97; R-71581 BUCHAREST
PRS	ROMPRES Bucharest (various call signs) **6972 9797 12110** = Agentia Romina de Presa; Piata Sceinteii 1; R- BUCHAREST
XXX	Bucharest (YPM 36) **6819.5**
XXX	Cluj (YPM) 4986
XXX	Giurgiu (YPO) 4986
XXX	Turnu Severin (YPI) 4986

RUSSIAN FEDERATION

RUS / EX R UA-UI / 20000-39999 /
UE UH-UI UL UMW-US UU-UW / 38E2

AF	CISAF Moscow 11274
AIR	Khabarovsk Air, SE 3116 5691 6691
AIR	Magadan Air, FE 3116 6691
AIR	Moscow Air 6617 = Ministry of Civil Aviation; 37 Saint Petersburg Prospekt; MOSCOW A-167
AIR	Rostov-na-Donu Air 6617
AIR	Saint Petersburg Air 6617
AIR	Samara Air = Aviameteorological Centre; Airport; 443025 SAMARA
AIR	Yuzhno-Sakhalinsk Air, FE 6691
CY	AEROFLOT Moscow 11193
DIP	Algerian E Moscow (7RV 20) **19032**
DIP	Austrian E Moscow (OEC ..) **14478.5 14520**
DIP	Bulgarian E Moscow **13456**
DIP	Egyptian E Moscow **10418.7 14966.7 14961.7 14971.7 15021.7**
DIP	French E Moscow ('U3H') **10750 13537 13548 14535**
DIP	German E Moscow **11540**
DIP	Pakistan E Moscow **14461.7**
DIP	Polish E Moscow **9066 10387 11447**
DIP	Romanian E Moscow **10435 11433**
DIP	Spanish E Moscow **13421.5**
DIP	Swedish E Moscow (SAM ..) **11046.9**
DIP	Swiss E Moscow (HBD 58) **13961.5**
MAR	Aleksandrov-Sakhalinskiy R, FE (RTEU) 2590 4283 (ULX) 2720
MAR	Anadyr' R, FE (UIF) 6470
MAR	Arkhangelsk R (RKLM) 4342.5 6371.5 8580 12942 16975 (UCE) **3245 4253** 4330 **6317 6337** 6470 **8549** 8610 8703 **12625.5 12700 12714 12795 17036** 17233.9 (UGE) 2595 4357 6510 8785 13173 17317 22714

MAR	Astrakhan' R (RFA) 12925 17025 (UCY) 3160 6345 6501 8728 13107 (UKJ) 6430 8475
MAR	Gelendhzik R (UVA) 4231.5 8454 12729 16930 = Maritime Radio Station UVA; POB 44; 353470 GELENDHZIK
MAR	Kaliningrad R (UIW) 2580 3737 4228 4277 4390 6465 6522 8454 8466 8555.5 8605 8737 8773 12690 12877.5 12973 13054 13086 13158 16927 16963 17152 17213.5 17231.4 17236.5 17242 17311 19724.5 22603.5 22681.5
MAR	Kholmsk R, FE (UAD) 4245 6420 (UFO) 4369 6513 8713 13116 17317 22732 (UQB) 3605 6380 8675 8680 12598 12678 16970
MAR	Korsakov R, FE (UKW) 3160 4283 8573 17033 (UQC) 2264
MAR	Magadan R, FE (UIB) 2525 4305 8530 (UVD) 4243 6365
MAR	Makhachkala R (UAW) 1758
MAR	Mezen' R (UDJ) 3210
MAR	Moscow R (UAT) 4354 6327.5 6522 8419 8431.5 8440.6 8480 8645 8731 8767 12599.5 12608 12739 12910 13077 13188 16813 16898.5 16992.8 17066 17257 22407.5 22493 22512 22714 = Morflot; Communications and Satellite Systems Centre; Director of Radio Department; 1/4 Ul. Rozhdestvenka; 103759 MOSCOW [telefax + +7 095 9269128 and + +7 095 9269038] (UJE) 6490 8530 12810 12967 17195
MAR	Murmansk R (ROD) 4295.5 6465.5 8450.5 (UDK) 4260 6393.5 6439.5 8698 12830 13050 17020 22659.5 (UHS) 4307 6400 6495 8429.5 8475 8690 8705.5 12637.5 12661.5 12730 12797 13010 13149 16922 16960 17275 22497 (UHY) 2666 4399 6510 8788 13095 17266 22720
MAR	Nakhodka R, SE (UAI) 6407 6432 8655 17090 22525 (UEO) 6513 8767 17278 (UFC) 6319 8510 12990 19714
MAR	Nar'yan Mar R (UEF) 2525
MAR	Nevelsk R, FE (UFM) 4345 6334.5
MAR	Nikolayevsk-na-Amure R, FE (UGN) 2264
MAR	Novorossiysk R (UDN) 4369 6501 8761 13101 13191 17242 22786 (UFN) 4213.5 4245 6316 8432.5 8571 12597.5 12602 12891 16839.5 17141 19699 22386 22501 = Novorossiysk Shipping Co; 1 Ul. Svobody; 253900 NOVOROSSIYSK (UGW) 8704.5 16980
MAR	Okhotsk R, FE (UCV) 2560
MAR	Petropavlovsk-Kamchatskiy R, FE (UBE) 4171 4369 6370 6513 8791 13000 13104 17284 22705 (UFH) 3590 6405 8451 12825 12835.5 13035 16990 17035 22455
MAR	Petrozavodsk R (RSGV) 4300 8570 12817.5
MAR	Provideniya R, FE (UCZ) 4357 6507 8731 13083 17278 (UGH) 3530 4212 6390 8570 12980
MAR	Rostov-na-Donu R (UFJ) 3625 4290 6369 6469 8683 13060 17020

MAR	Saint Petersburg R (RSBM) 6360 (UBF) 8451 12855 17065 (UCW) 4223 6380 8505 12765 (UGC) **2625 3215** 3540 **4315** 4396 **6325.5** 6354 **6370** 6425 6522 8575 **8600 8677.5** 8687.6 8737 **12632.5** 12693 **12901.5** 12925.5 **13030** 13086 **16846 16970 17010** 17115 17254 **19693 19734.5** = (reception reports to Baltic Shipping Co; 5 Mezhevoy Canal; 198035 SAINT PETERSBURG)
MAR	Severo-Kuril'sk R, FE (UNR) 6420
MAR	Tuapse R (RPLT) 4240 6415 8657 12715 (UIS) 6390 6405 8590 12990
MAR	Uglegorsk R, FE (UBC) 2720
MAR	Vanino R, FE (UBR) 2720
MAR	Vladivostok R, SE (UFL) 4285 **6318** 6385 6445 **8423** 8515 8585 **8595 12591.5** 12729 12955 **16836** 17110 **17175** 22571.5 (UFZ) 4241 **6430 6460** 8505 8643 **12588** 12870 12933 **16841** 17040 (UIK) 2605 4357 6507 8731 13077 17260 22699
MET	Arkhangelsk Meteo (RGH/RSW/RVZ) *3657 5347* **7760** *7762* = North Regional Administration for Hydrometeorology and Environmental Monitoring; Arkhangelsk Radiometeorological Centre; 2 Mayakovsky Street; 163020 ARKHANGELSK
MET	Irkutsk Meteo, SE (RKR) **4560**
MET	Magadan Meteo, FE (RNR 4) *9355*
MET	Moscow Meteo (various call signs) *53.6 3875 4560 5150 7670 10980 15950* = Russian Federal State Committee for Hydrometeorology; International Co-Operation Department; 12 Pavlik Morozov Street; 123376 MOSCOW
MET	Samara Meteo (RDE/RGJ) *2720 3710 5102*
NAV	CISN Kaliningrad (RMP) 3181 3264 5738 6936 7640 9373 10118
NAV	CISN Vaygach (RIT) 4804 11155
TSF	Irkutsk TS, SE (RID) 5004 10004 15004 (RTZ) 50
TSF	Moscow TS (RWM) 4996 9996 14996
TSF	Novosibirsk TS, SW (RTA) 10000 15000
XXX	Beacon Arkhangelsk ('S') 5153.9 7038.9 10871.9 13527.9 16331.9
XXX	Beacon Kaliningrad ('P') 3167 3208 3649 3807 4031 4043 4476 5111 6873
XXX	Beacon Moscow ('C') 5154 7039 10872 13528 16332
XXX	Beacon Vladivostok ('F') 16332
XXX	DOSC Moscow **6803 6814 10625 14402 14648 18346.9**
XXX	IAG Moscow (RYM) 10275
XXX	Khabarovsk, SE (UTN) 7705
XXX	Moscow (RND) 5374.5
XXX	MOSSAD/SOUD Moscow ('RK2') **16247**
XXX	R Moscow feeder (various call signs) 3384 5296 6805 6822.5 6890 7970 8005 10235 10344 11575 12175 13370 14410 14950 15980 16300 16330
XXX	Smolensk (RDL) 7008 10490 12684 12832 14171 21284
XXX	SOUD Moscow (RLX) **11112 13506**
XXX	Tyumen', SW (RFE) 7089

RWANDA

RRW / 9X / 64380-64389 / HR / 93A8

AIR	Kigali Air = Ministere des Postes et des Communications; Direction Generale de l'Aeronautique; Le Chef des Services Techniques; BP 720; KIGALI
UNO	UNO Kigali **19309.5**

SAINT HELENA SHN / see United Kingdom / 61901 / FH / 96B14

MAR Jamestown R (ZHH) 3162 4396 8737 13149 = (reception reports to C+W Jamestown)
PTT C+W Jamestown = Cable and Wireless PLC; "The Briars"; POB 2: JAMESTOWN

SAINT KITTS AND NEVIS SCN / V4 / 78850-78859 / TK / 116o3

AIR Basseterre Air = Ministry of Communications and Works; POB 186; BASSETERRE

SAINT LUCIA LCA / J6 / 78945-78949 / TL / 116o8

AIR Castries Air = Civil Aviation Department; POB 651; Vigie Airport; CASTRIES

SAINT-PIERRE AND MIQUELON SPM / see France / 71804 / LFV / 98P7

AIR Saint-Pierre Air = Service de l'Aviation Civile; Boulevard de Port-en-Bessin; BP 4265; F-97500 SAINT-PIERRE
MAR Saint-Pierre R (TXU) 2038 2115 2410 2582 3171 = (reception reports to DTRE Saint-Pierre)
PTT DTRE Saint-Pierre = Centre des Telecommunications; BP 4241; F-97500 SAINT-PIERRE

SAINT VINCENT AND THE GRENADINES VCT / J8 / 78950-78953 / TV / 116o8

SAMOA (AMERICAN) SMA / see United States of America / 91765 / NST / 122D1

MAR Pago Pago R (KUQ) 2638 2845 4378 6361 8585 8734 12871.5 13170 17353 = Government of American Samoa; Direction of Communications; Coastal Station Pago Pago Radio KUQ; PAGO PAGO 96799
MAR Swains Island R (KUQ 23) 2845

SAMOA (WESTERN) SMO / 5W / 91730-91749 / NSA-NSM / 122A2

AIR Apia Air = Prime Minister's Department; Western Samoa Airport Authority; Chief Air Traffic Controller; Private Bag; Faleolo International Airport; APIA
AIR PA Apia 9035
AIR PA Faleolo 9035
MAR Apia R (5WA) 2206 4357 6507 8776 13113 17311 = (reception reports to GPO Apia)
PTT GPO Apia = Posts and Telecommunications Department; General Post Office; APIA

SAN MARINO SMR / T7 / - / - / 78M7

SAO TOME AND PRINCIPE STP / S9 / 61931-61934 / FP / 91A12

AIR Sao Tome Air = Direccao da Aviacao Civil; CP 97; SAO TOME
MAR Sao Tome R (S9M) 2680 2780 4283 4402 4429 8634 8728 8758 12817 13086 13113 16966 17293 17353 = (reception reports to ENATEL Sao Tome)

PTT	ENATEL Sao Tome = Empresa Nacional de Telecomunicacoes; CP 141; SAO TOME

SAUDI ARABIA ARS / HZ 7Z 8Z / 40350-40549 41000-41149 / OE / 33

AIR	Jeddah Air = Air Traffic Services Directorate; POB 929; JEDDAH 21421
AIR	Riyadh Air **7595**
AIR	SAUDIA Jeddah (7ZA 222) 4710 6685 17982
CY	Abu Safa Oilfield **8576.7**
DIP	French E Riyadh ('O6P') **14540 16245**
DIP	German E Riyadh **18289.5**
MAR	Dammam R (HZG) 1635 1641 1780 1825 4253.5 4278 4309 4372 4381 6364.5 6387 6466 6501 6507 8484.5 8556.5 8651 8740 8749 12752.5 12792 13076.7 13080 13143 16953 17062 17198.3 17245 17266 22484 22588.7 22677.5 22759 22786 = Coast Radio Station; Station Chief; POB 357; DAMMAM 31132
MAR	Jeddah R (HZH) 1726 1856 = Jeddah Radio; Station Manager; POB 1531; JEDDAH 21411
MET	Jeddah Meteo (HZN) **3745 4570 7510 7625 10215 11125 17590 23370** = Ministry of Defense and Aviation; Meteorological and Environmental Protection Administration; Director of Telecommunications; POB 1358; JEDDAH 21431
MIL	FF Dhahran ('RFFVAE') **7779.7 13430.7 14798.7 16106.7**
MIL	USA Dhahran ('141') **14546.7**

SENEGAL SEN / 6V-6W / 61600-61699 / GO / 89B4

AIR	ASECNA Dakar (6VU) **6975 10407** = Representation de l'ASECNA; BP 8131; DAKAR-YOFF
DIP	Algerian E Dakar (7RY 50) **19141.2**
DIP	Egyptian E Dakar **13446.7**
DIP	French E Dakar ('DKAR') **16207 16213** ('L4N') **11042 13537 13548 13556**
DIP	German E Dakar **18291.5**
MAR	Dakar R (6VA) 1813 2586 4295 4366 6383 8690 8725 13110 16947.6 17326 22753 = Office des Postes et Telecommunications du Senegal; Exploitation des Postes et Telecommunications du Senegal; Station Radiomaritime Dakar-Radio; BP 5; THIAROYE par Dakar
MAR	Ziguinchor R 1630
MET	Dakar Meteo (6VU) **19747.5** *19751.5* = Ministere de l'Equipement; Direction de la Meteorologie Nationale; Section des Transmissions; BP 8257; DAKAR-YOFF
MIL	FF Dakar ('RFTJ') **5099.7 6784.7 6901.7 7456.7 7705.7 7983.7 10917.7 12090.2 14481.7 14926.7 14959.7 17550.9 18553.7** = (reception reports to FN Dakar)
NAV	FN Dakar (6WW) **8538 12857 16951.5** = (reception reports to Le Chef des Stations Interarmees des Transmissions de Yeumbeul et Rufisque; BP 3024; DAKAR)
PRS	PANA Dakar (6VK) **16117** = Agence Panafricaine d'Information; Service Technique; BP 4056; DAKAR [*http://www.nando.net/ans/pana/*]

SERBIA SRB / YT-YU YZ 4N-4O / 13000-13599 / LY / 81F6

AIR	Belgrade Air = Savezna uprava za civilnu vazdusnu plovidbu; Brankova 25/V; Postanski Fah 566; 11000 BELGRADE
DIP	Austrian E Belgrade (OEC ..) **5070.5 7893.5**
DIP	Czech E Belgrade **10612**
DIP	Egyptian E Belgrade **14501.7**
DIP	French E Belgrade ('G8T') **5118 9085 11049 13550**

DIP Hungarian E Belgrade **5478.5**
DIP Indian E Belgrade (8WB 1) **15917.7**
DIP Italian E Belgrade **9283 9294**
DIP MFA Belgrade ('DFZG') **5312 5317 7805 7808 9057 11139 13397 13399 14674 14912 16295 16302 17432 18055 18972**
DIP Norwegian E Belgrade **12124**
DIP Polish E Belgrade **4962 6807**
DIP Swiss E Belgrade (HBD 40) **9166.5 10953**
IRC ICRC Belgrade ('RC2BEL') **3802 5144 5149 5154 5159 5164 5169 6996 10283**
MAR Bar R (YUW) 2615 2670 2685 2752 2771 4405 6501 8797 13095 17353 = Ustanova za odrzawanje pomorskih plovnih putova; obalna radiostanica Bar; 81350 BAR
PRS TANJUG Belgrade (YZI) **5240 7658 7806 12212.5 13440** = Telegrafska Agencija Nova Jugoslavija; Administracija; Obilicev Venac 2; Post. fah 439; BELGRADE
UNO UNO Belgrade
('HCYB') **6475**
('HCYUGBE') **4854 6475**
UNO UNO Jablanica ('HCYUGJA') **8031**
UNO UNO Vrela
('HCNOSVL') **6475**
('HCYV') **6475**
XXX AHE Belgrade **10161.5**
XXX many stations 4763

SEYCHELLES

SEY / S7 / 63980-63999 / FS / 26R11

AIR Victoria Air = President's Office; Department of Finance; Directorate of Civil Aviation; International Airport; POB 181; VICTORIA, Mahe
MAR Victoria R (S7Q) 2595 4349 4384 8445 8770 12660 13119 17242 = (reception reports to C+W Victoria)
PTT C+W Victoria = Cable and Wireless PLC; Francis Rachel Street; POB 4; VICTORIA, Mahe

SIERRA LEONE

SRL / 9L / 61850-61899 / GF / 89C7

AIR Freetown Air = Ministry of Transport and Communications; The Director of Civil Aviation; Ministerial Office Block; George Street; FREETOWN
CY SLRA Freetown **7951.5**
CY SLRA Moyamba **7951.5**
MAR Freetown R (9LL) 2710 2755 6411 8728 13042.5 17175.2 = (reception reports to SLECOM Freetown)
PTT SLECOM Freetown = Sierra Leone External Telecommunications Ltd; POB 80; FREETOWN

SINGAPORE

SNG / S6 9V / 48680-48799 / WS / 18J3

AIR Singapore Air = Civil Aviation Authority of Singapore; Director General of Civil Aviation; Frequency Management Engineer; POB 1; Changi International Airport; SINGAPORE 9181
DIP Egyptian E Singapore **16151.7**
MAR Singapore R (9VG) 2760 4313 4322 4369 **6320 6323.5 6340.5 6412 6504 8420.5 8426.5** 8430 8728 8761 8788 **12579.5 12590 12593.5 12597** 12659.5 12707 12724 12733.5 13122 13131 16807 16815 16818.5 16822.5 16868 16966.5 16994 17232.9 17362 **22377.5 22381 22385 22389 22479** 22578.5 22729 = Singapore Telecom; International Mobile Division; Mobile Communication Group; Orchard Point POB 38; SINGAPORE 9123

PRS	KYODO Singapore (9VF) *16035 17430* = (reception reports to KYODO Tokyo, Japan)
PTT	Singapore Telecom; Regulations & Licensing Department; Frequency Management; Comcentre 2nd Floor; 31 Exeter Road; SINGAPORE 0923

SLOVAKIA SVK / OM / 11800-11999 / LZ / 62L7

DIP	Indonesian E Bratislava **18411.5**
DIP	MFA Bratislava (OMS / OMZ 66) **4898 7899 7958 8006 9266 11410 12208 15943 18318** = Ministerstvo Zakranicnich Veci; Radio Section; BRATISLAVA
DIP	Polish E Bratislava **5734**
MAR	Bratislava R (OMC) 13057

SLOVENIA SVN / S5 / 14000-14199 / LJ / 81B4

SOLOMON ISLANDS SLM / H4 / 91500-91529 / AG / 15K2

AIR	Honiara Air = Ministry of Posts and Communications; Civil Aviation Division; Honiara/Henderson Airport Manager; GPO; HONIARA
MAR	Honiara R (H4H) 2167 = (reception reports to SOLTEL Honiara)
PTT	SOLTEL Honiara = Solomon Telecom Co Ltd; Telecom House; Mendana Avenue; HONIARA
XXX	Honiara (H4C) 5826

SOMALIA SOM / T5 6O / 63150-63299 / HC / 87J9

AIR	Muqdisho Air 7595 = Department of Civil Aviation; POB 310; MUQDISHO
DIP	Egyptian E Muqdisho **18005.7**

SOUTH AFRICA (REPUBLIC OF) AFS / ZR-ZU / 68000-68938 / FA / 94F6

AIR	Johannesburg Air = Forecast Office; Department van Vervoer; Department of Transport; Weerkantoor; JAN SMUTS AIRPORT 1627
DIP	Polish E Pretoria **18202**
DIP	Swedish E Pretoria (SAM 76) **19217.9**
DIP	Swiss E Pretoria (HBD 41) **18270.5**
MAR	Cape Agulhas R (ZSA) 1764 2191 2356 2594 2606 2694 2783
MAR	Cape Columbine R (ZSM) 1764 2191 2356 2594 2606 2694 2783
MAR	Cape Town R (ZSC) 1764 2606 **2850 4214** 4291 4317 4369 4426 4435 6379.5 **8428.5** 8461 8688.5 8719 8725 8731 12601 12698 12724 12772.5 13101 **16816** 17164.8 17210.6 17263 17338 22705 22711 25277 = Cape Town Radio ZSC; Control Officer; Private Bag X01; MILNERTON 7435
MAR	Durban R (ZSD) 1764 2606 2762 4375 **6322** 8740 13146 = Durban Radio; POB X291; PINETOWN 3600
MAR	East London R (ZSE) 2356 2593 2606 2716 2783
MAR	Port Elizabeth R (ZSQ) 1764 2191 2606 2716 4363 8725
MET	Pretoria Meteo (ZRO) *4014* **4018** *7508* **7512** *13538* **13542** *18238* **18242** = Department of Environment Affairs; Chief Director; The Weather Bureau; 159 Struben Street; Private Bag X097; PRETORIA 0001 [telefax + +27 12 3233041 or 3235920]
NAV	SAN Cape Town (ZRH/ZRQ) 8604.3 **16537** = Cape Naval Radio ZRH; Private Bag; WYNBERG 7824

SPAIN E / AM-AO EA-EH / 08000-08494 08900-08999 60320 60338 / GE LE / 73

AF	SAF Cartagena 6730
AIR	Madrid Air = Direccion General de Aviacion Civil; Jefe de Telecomunicaciones; Avenida de America 25-8a. planta; E-28002 MADRID
DIP	Bulgarian E Madrid **13427**
DIP	Egyptian E Madrid **10461.7 13501.7**
DIP	German E Madrid **13511.5 13897 15858.5**
DIP	MFA Madrid (EAE 220) **5792.6 5830 6797.8 12112.5 15946.5**
DIP	Polish E Madrid **4962**
DIP	Romanian E Madrid **16340**
DIP	Swedish E Madrid (SAM 30) **16106.9**
DIP	Swiss E Madrid (HBD 55) **10971**
MAR	Cabo de Gata R 1767 2679
MAR	Cabo Penas R (EAS) 1677 2649
MAR	Chipiona R 1656 2842 = (reception reports to PTT Madrid)
MAR	Finisterre R (EAF) 1764 2806 = (reception reports to PTT Madrid)
MAR	La Coruna R 1698 2596
MAR	Machichaco R 1707 2586 = (reception reports to PTT Madrid)
MAR	Madrid R (EAD/ED/EHY) **4210.5 4213.5** 4235.5 4269.5 4349 4372 4375 4387 **6319 6325** 6337 6382.2 6400.5 6496.4 6510 **8420 8429** 8457 8473 8618 8682 8710 8713 8725 8728 8746 8764 **12581.5 12590 12599** 12673.5 12691 12887.5 12934.5 13056 13065 13077 13104 13149 13155 13176 13191 **16809.5 16819 16826** 16942.8 17064.8 17175.2 17184.8 17329 17341 17350 17356 17389 17398 17404 19755 19791 19794 **22379 22396** 22446 22533 22622.5 22696 22765 22780 22828 22837 26163 = (reception reports to PTT Madrid)
MAR	Palma R (EAO) 1755 = (reception reports to PTT Madrid)
MAR	Tarifa R (EAC) 1704 2610 = (reception reports to PTT Madrid)
MET	Madrid Meteo (ECA) *6918.5 10250* = Ministerio de Transportes, Turismo y Comunicaciones; Instituto Nacional de Meteorologia; Seccion de Comunicaciones y Graficos; Head of Meteorological Communications Office; E-28070 MADRID
MIL	SA Algeciras ('RETCQL') 5784
MIL	SA Cadiz ('RETC') **5346**
MIL	SA Jerez de la Frontera ('RETCJNA') **5346**
MIL	SA Vitoria ('RETAQE') **10435.5**
MOI	Guardia Civil Algeciras ('RETZSL') **5872.5**
MOI	Guardia Civil Alicante ('RETYVA') **5008.5 5320.5**
MOI	Guardia Civil Almeria ('RETZSA') **5872.5**
MOI	Guardia Civil Avila ('RETYMA') **4751 5289**
MOI	Guardia Civil Badajoz **5320.5**
MOI	Guardia Civil Barcelona ('RETWB') **3219.5 4563.5 5320.5 5353.5 7529.5 9178.5**
MOI	Guardia Civil Caceres ('RETYMC') **5008.5 5320.5**
MOI	Guardia Civil Cadiz ('RETZSC') **5872.5**
MOI	Guardia Civil Castellon ('RETYVC') **5008.5 5321.5**
MOI	Guardia Civil Cordoba ('RETZSO') **5320.5**
MOI	Guardia Civil Cuenca ('RETYMV') **5008.5 5321.5**
MOI	Guardia Civil Gerona ('RETWBG') **3219.5 5353.5 7528.5**
MOI	Guardia Civil Granada (RETZSG') **5872.5**
MOI	Guardia Civil Guipuzcoa ('RETWLG') **4493 4751 4752.5 5381.5**
MOI	Guardia Civil Huelva ('RETZSH') **5008.5**
MOI	Guardia Civil La Coruna ('RETWC') **2752.5 5381.5 5869.5**
MOI	Guardia Civil Lerida ('RETWBL') **4563.5 5353.5**
MOI	Guardia Civil Lugo ('RETWCL') **5869.5**
MOI	Guardia Civil Malaga ('RETZSM') **5872.5**
MOI	Guardia Civil Manresa ('RETWBM') **3219.5**
MOI	Guardia Civil Melilla ('RETZSE') **4752.5 5353.5**
MOI	Guardia Civil Murcia **5008.5**
MOI	Guardia Civil Palencia ('RETWVP') **4875.5 5287.5**

MOI	Guardia Civil Pamplona ('RETWLN') **4913 5381.5**
MOI	Guardia Civil Pontevedra ('RETWCP') **2752.5 5869.5**
MOI	Guardia Civil Sevilla ('RETZS') **4752.5 5008.5**
MOI	Guardia Civil Tarragona ('RETWBT') **5353.5**
MOI	Guardia Civil Toledo ('RETYMT') **5320.5**
MOI	Guardia Civil Valencia ('RETYV') **5008.5**
MOI	Guardia Civil Vitoria ('RETWLA') **5287.5**
MOI	Guardia Civil Zaragoza ('RETWBZ') **4493 5353.5**
MOI	MOI Madrid ('RETXX') **4751 5287.5 5289 5320.5 5377.5 5381.5 5869.5 5872.5 7528.5 7529.5 9178.5**
NAV	SN Madrid (EBA) 2841 3790 4261 6388 6408.5 6930 8528.5 12660 13059 14641 17018 = EREMA; Calle Real 97; E-28700 SAN SEBASTIAN DE LOS REYES
NAV	USN Rota (AOK) *7595 9050 10542* = US Naval European Meteorology and Oceanography Center; Commanding Officer; PSC 819 Box 31; FPO AE 09645-3200; USA [telefax + +34 5682 2963 or + +34 5682 3984]
PTT	PTT Madrid = Telefonica; Redes para Moviles; Seccion Maritimo; C/ Beatriz de Bobadilla 3; E-28040 MADRID [telefax + +34 1 5849271]

SRI LANKA SLK / 4P-4S / 43400-43499 / VC / 26R6

AIR	Colombo Air = Colombo Airport (Ratmalana); Department of Civil Aviation; Office of the Chief Signals Officer; Chief Officer; Mt. Lavinia; COLOMBO
MAR	Colombo R (4PB) 4247 4363 4372 4384 6395 6501 8473 8722 8740 12925.5 13146 17045.6 17359 = Colombo Radio; 26 Old Waidya Road; DEHIWELA
UNO	UNO Jaffna **14643.7**
XXX	DW Trincomalee (4QQ) **15770**

SUDAN SDN / SSN-ST 6T-6U / 62600-62999 / HS / 84G4

AIR	Khartoum Air (STK) **11634.5 13996.5 18173.5** = Ministry of Defense; Civil Aviation Department; Office of the Director of Telecommunications; POB 430; KHARTOUM
DIP	Algerian E Khartoum **18529.5**
DIP	Egyptian E Khartoum **9102.7 10172.7 14645.7 16016.7 16156.7**
DIP	Turkish E Khartoum **14959**
IRC	ICRC Khartoum (6TR 88) **13966.5 14373.5**
MAR	Port Sudan R (STP) 1750.5 2740 4226.5 8652
PRS	SUNA Khartoum **15731 19463** = Sudan News Agency; Technical Department; Gumhoria Street; POB 1506; KHARTOUM
UNO	UNO Khartoum (4UK) **14643.7**

SURINAM SUR / PZ / 81200-81399 / SM / 117A2

AIR	Zanderij Air = Ministry of Transport, Trade and Industry; Department of Civil Aviation; Air Traffic Service; Chief; POB 1981; Zorg en Hoop; PARAMARIBO SOUTH
MAR	Paramaribo R (PZN) 2818 4378 8740 13095 17263 22717 6355 8652.5 13046 4255.3 16956 = TELESUR; Telecomunicatiebedrijf Suriname; Chief Coast Station; Gravenstraat 13; POB 1839; PARAMARIBO

SWAN ISLANDS SWN / see Honduras / 78501 / MHIC / 116C6

SWAZILAND SWZ / 3DA-3DM / 68396 / FD / 94L6

AIR Mbabane Air = Ministry of Works, Power and Communications; Civil Aviation Branch; POB 58; MBABANE

SWEDEN S / SA-SM 7S 8S / 02000-02699 / ES / 49H5

AIR Stockholm Air (SDR/SG/SK) 6826 10575 10805 11222 13576 13942 18042 23040 = Telekomisarien Luftfartsverket; S-190 45 STOCKHOLM-ARLANDA
DIP MFA Stockholm (SAM) **7603.9 7606.9 10165.9 10582.9 11046.9 12101.9 12103.1 12227 14354.9 14405.9 14814.4 14970.9 15821.9 15861.9 16106.9 17428.9 18187.5 18688 18757.9 19217.9 20699.9 20959.9** = Utrikesdepartementet; Radioavdelningen; Box 16121; S-103 23 STOCKHOLM
DIP Polish E Stockholm **6954 7637 8126**
DIP Romanian E Stockholm **10453 10463**
DIP Somali E Stockholm ('MLOP') **14295 14322 14331**
DIP Swiss E Stockholm (HBD 44) **10971**
DIP Turkish E Stockholm **10433**
MAR Goeteborg R (SAB/SAG) **1905 2423.5 2716 4214.5 4216.5 4218.5 4268.6** 4357 4408 4414 4426 **6314.5 6323 6326.5** 6460 6507 6513 **8419.5 8428 8434.5** 8556 8719 8725 8785 8791 8797 12582 12591 12652 12818 13083 13119 13131 13152 **16813.5 16838 16851.5** 17024 17254 17263 17281 17362 **22379.5** 22702 22726 22732 22777 22783 26383 = Televerkets Kuststation; Goteborg Radio; S-439 00 ONSALA
MAR Karlskrona R (SAA) 2789 4275 6357 12675 = Karlskrona Radio SAA; Box 8051; S-371 08 LYCKEBY
MAR Stockholm R (SDJ) 1674 1710 1779 1797 2733 2754 = Telia Mobitel AB; Stockholm Radio; QSL Manager; S-131 87 NACKA STRAND
MAR Tingstaede R (SAE) 2768

SWITZERLAND SUI / HB HE / 06600-06794 / LS / 66

AIR Berne Air (HB/HE) 5395 9211 13205 15046 18023 [*http://www.bernradio.ch/*]
AIR Zürich Airadio; c/o SWISSCONTROL; Betriebsabteilung Flugsicherung; Postfach; CH-3000 BERNE 14
DIP MFA Berne (HBD 20) **5752.5 5757 5773 7659 7677 9166.5 9174.5 9178 10953 10963 10967 10971 10973 13951 13954.5 13958.5 13961.5 13965.5 16101 16111.1 16118 16120 16124 18270.5 18276.5 18279.5 18284.6**
DIP Norwegian E Berne **6962**
IRC ICRC Geneva
(HBC 88) **13541 13913.5 13963.5** 13965 **13966.5 13974.2 13998 14373.5 18066.5 20754.4 20815**
(HB8 GVA) **3803.6 6997.4 10283**
MAR Berne R (HEB/HEC) **4215.5** 4378 4420 4426 **8420.5 8425.5** 8710 8725 8782 8788 8809 **12588 12600.5** 13080 13104 13155 13164 13185 **16814.5 16830** 17272 17284 17305 17332 17407 19779 **22381.5 22401** 22735 22753 22789 22831 26151 = Schweizerische PTT-Betriebe; Maritime Mobile Service; Bern Radio; Laupenstr. 18; CH-3030 BERNE [telefax ++41 31 262516; *http://www.bernradio.ch*]
TSF Nyon TS (HBG) 75 = (reception reports to Observatoire Cantonal; CH- NEUCHATEL)
UNO UNO Geneva (4UZ/'HCSWIGE') 4090 4091.7 5778 **6475 9004 10151.9 11405 14405 14405 14642 14643.7 19309.5 20734** = United Nations; RCMS; Chief; CP 2500; CH-1211 GENEVA 2 Depot [telefax ++41 22 7398475]

SYRIA

SYR / YK 6C / 40000-40099 / OS / 34E3

AIR Damascus Air = Ministry of Transport; Directorate General of Civil Aviation; Director of Air Traffic Services; 1 Sahet Al-Nejmeh; POB 6257; DAMASCUS
DIP Algerian E Damascus **18529.5**
DIP Austrian E Damascus (OEC ..) **10422.5**
DIP Hungarian E Damascus (HGX 41) **12264.5 13875.8 14840.8 15676.2**
DIP Polish E Damascus **8137**
DIP Swedish E Damascus (SAM 48) **14405.9**
MAR Al Ladhiqiyah R (YKM) **3624 4390 8625 8740 12728 13089 17344** = (reception reports to STE Damascus)
MAR Tartous R (YKO) **2662 8755 13110** = (reception reports to STE Damascus)
MIL CFARS Golan Heights (VXV 9) **14452.5**
PRS SANA Damascus = (reception reports to STE Damascus)
(YKW) **3560**
(-) **11080**
PTT STE Damascus = Syrian Telecommunications Establishment; Directorate of Telecommunications Operation; Department of International Relations; Saadallah Jabiri Street; DAMASCUS
XXX Al Fatah Damascus 10100

TAIWAN

TAI / see China / see China / RC / 23J7

MAR Chi-lung R (XSX) 2055 2191 2670 8445 8506 12695.5 12785 17011 17053 22459 = Chi-lung Maritime Coast Radio Station XSX; 53 Ai 4th Road; CHI-LUNG
MAR Hua-lien R (XSY) 8546 8700 = Hua-lien Coast Radio Station XSY; Chung Jeng Road 595; HUA-LIEN 970
MAR Kao-hsiung R (XSW) 2086 2191 2738 4338 8582 8632 12727.5 12864 16940 17035 22565 = Kao-hsiung Radio Station XSW; 142 Jiin-Tien Road; KAO-HSIUNG
MAR T'ai-chung R (XSW 2) 8511 = T'ai-chung Maritime Coast Radio Station; 37 Shih Fu Road; T'AI-CHUNG
MAR T'ai-pei Radio (BVA) 4381 4432 6501 8722 8752 8755 8770 8782 8788 8803 8809 13077 13095 13098 13113 13122 13158 17248 17263 17269 17281 17308 17332 17338 22696 22714 22735 22750 22771 = (reception reports to Long Distance Telecommunications Administration; Managing Director; 52 Ching Shan South Road Section 2; T'AI-PEI 10605)
MET T'ai-pei Meteo (BM) 3641 *4616 5250* 5909 8117 *8140* 13560 *13900 18560* = Central Weather Bureau; Telecommunication and Radar Division; Director; 64 Kung Yuan Road; T'AI-PEI 10039 [telefax ++886 2 3491089]
PRS CNA T'ai-pei (3MA) *9430 13766 14685 15878 19680 22850* = Central News Agency Inc; Communications Department Chief; 209 Sungchiang Road; T'AI-PEI [*http://www.cna.com.tw/*]
TSF T'ai-pei TS (BSF) 15000 = Telecommunications Laboratories; Ministry of Communications; POB 71; CHUNG-LI 320
XXX INTEL T'ai-pei **16448**

TAJIKISTAN

TJK / EY / see Russian Federation / UTD / 43J7

DIP Turkish E Dushanbe **15843**

TANZANIA

TZA / 5H-5I / 63729-63971 / HT / 91E4

AIR Dar es Salaam Air = Ministry of Communications and Works; Directorate of Civil Aviation; Senior Communications Officer; POB 2819; DAR ES SALAAM
DIP Algerian E Dar es Salaam **18944.5**
DIP German E Dar es Salaam **15856.5**

DIP	Norwegian E Dar es Salaam **19827**
DIP	Swedish E Dar es Salaam (SAM 71) **18688 19217.9**
MAR	Zanzibar R (reception reports to PTT Dar es Salaam)
PTT	PTT Dar es Salaam = Tanzania Posts and Telecommunications Corp; POB 9070; DAR ES SALAAM

THAILAND

THA / HS / 48300-48599 / VT / 25E5

AIR	Bangkok Air = Aeronautical Radio of Thailand Ltd; Aeronautical Telecommunication System Engineering Department; Manager; 102 Gnamduplee; Tungmahamek; GPOB 535; BANGKOK
DIP	French E Bangkok ('G7M') **19650**
DIP	Polish E Bangkok **14784**
IP	INTERPOL Bangkok (HSQ) **18756**
MAR	Bangkok R (HSA) 2686 2746 4348.5 4349.4 6507 6513 8573.5 8686 8734 8758 12800 13086 13116 = (reception reports to CAT Bangkok)
MAR	Songkhla R 2686 2719
MET	Bangkok Meteo (HSW) 6765 *7395* **10169 10299** *17520* **17521** = Meteorological Department; Telecommunication Division; 4353 Sukumvit Road; BANGKOK 10260 [telefax + +66 2 39945978]
PTT	CAT Bangkok = Communications Authority of Thailand; Director of Telecommunication Services Division; New Road; 10002 BANGKOK

TOGO

TGO / 5V / 65350-65399 / DX / 89K8

AIR	ASECNA Lome = Representation de l'ASECNA; BP 123; LOME
MAR	Lome R (5VA) 1650 2586 4363 = (reception reports to PTT Lome)
PTT	PTT Lome = Ministere de l'Equipement et des Postes et Telecommunications; LOME

TOKELAU ISLANDS

TKL / see New Zealand / 91720-91749 / - / 10S3

TONGA

TON / A3 / 91770-91799 / NFT / 9U14

AIR	Nuku'alofa Air = Ministry of Civil Aviation; Queen Salote Road; POB 845; NUKU'ALOFA
MAR	Nuku'alofa R (A3A) 2080 2662 4315.5 4381 4408 6371.5 6510 6513 8643.5 8773 8785 12864 13119 13164 16912 17293 17317 = (reception reports to TTC Nuku'alofa)
PTT	TTC Nuku'alofa = Tonga Telecommunication Commission; POB 46; NUKU'ALOFA
XXX	Ha'apai (A3F) 4042
XXX	Ha'afeva (A3E) 4042
XXX	Nuku'alofa (A3A 30) 4042

TRINIDAD AND TOBAGO

TRD / 9Y-9Z / 78960-78974 / TT / 116o9

AIR	Port of Spain Air = Ministry of Public Utilities and National Transportation; Civil Aviation Division; POB 552; PORT OF SPAIN
MAR	North Post R (9YL) 2735 3165 6470.5 8441 12885 17184.8 = (reception reports to TEXTEL Port of Spain)
MAR	Port of Spain R 6210.4 8281.2 12421
PTT	TEXTEL Port of Spain = Trinidad and Tobago External Telecommunications Company Ltd; Manager Operations; POB 3; PORT OF SPAIN

TRISTAN DA CUNHA

TRC / see United Kingdom / 68902-68906 / - / 96B16

TUNISIA

TUN / TS 3V / 60700-60799 / DT / 88S4

AIR	Tunis Air = Centre de la Navigation Aerienne; 2035 TUNIS-CARTHAGE
DIP	Belgian E Tunis **11105**
DIP	Egyptian E Tunis **16156.7**
DIP	French E Tunis ('K4X') **11033**
DIP	MFA Tunis **3831 4439 5370 13956.5**
DIP	Swedish E Tunis (SAM 78) **14814.4**
MAR	Bizerte R (3VB) 1686 2210
MAR	Kelibia R (3VL) 1740
MAR	Mahdia R (3VM) 1695 1771
MAR	Sfax R (3VS) 1671 2719
MAR	Tabarka R (3VK) 1779
MAR	Tunis R (3VT) 1767 2670 = (reception reports to PTT Tunis)
MAR	Zarzis R (3VZ) 1659
NAV	TN Tunis **4716.7 5273.7 5391.7 6741.7**
PTT	PTT Tunis = Ministere des Communications; Division des Transmissions; Subdivision Radio et Frequences; L'Ingenieur General; 3 bis Rue de l'Angleterre; TUNIS
XXX	Bou Salem **5796**

TURKEY

TUR / TA-TC YM / 17000-17399 / LT / 27B2

AF	USAF Adana (AJO) 4724 6739 11244 15016 17976
AIR	Ankara Air = Ministry of Communications; Civil Aviation Department; TR- ANKARA
AIR	Istanbul Air = Meydah Meteoroloji; Istasyounou Müdürlügü; Havalaani; TR-ISTANBUL
DIP	Austrian E Ankara (OEC ..) **10422.5**
DIP	Egyptian E Ankara **9226.7 19266.7**
DIP	Indonesian E Ankara **18066.5**
DIP	MFA Ankara (TAD) **10433 10802 12175 13550 13833 13887 14863 14867 14959 14963 14993 15843 16908 16963**
DIP	Pakistan E Ankara **16386.7**
DIP	Polish E Ankara **13546**
DIP	Romanian E Ankara **6804.4**
DIP	Swedish E Ankara (SAM 45) **14814.4**
DIP	Swiss E Ankara (HBD 59) **13954.5**
MAR	Antalya R (TAL) 2693 4381 17299
MAR	Canakkale R (TAT) 1850 4375 8746 13152
MAR	Iskenderun R (TAI) 2629 3648 4414 22762
MAR	Istanbul R (TAH) 2670 4253 4387 4405 4414 6436.5 6491.5 6510 8431 8611.5 8662 8746 8749 8809 8812 12654 12736.5 13128 13140 13173 13191 **16886** 17008.8 17021.6 17257 17272 17293 22548 22735 22762 = (reception reports to TGM Istanbul)
MAR	Izmir R (TAN) 1850 2760 4357 6504 17293
MAR	Mersin R (TAM) 2820 8725 13092 13122 17272 22732 22735
MAR	Samsun R (TAF) 1760 2670 2760 4414 17257
MAR	Trabzon R (TAO) 2760 4357 6504
MAR	Zonguldak R (TAR) 2670 4387 13140
MET	Ankara Meteo (YMA) *3377* **3550** *6790* **10423** = Turkish State Meteorological Service; Devlet Meteoroloji Isleri; Genel Müdürlügü; Acting Director General; POB 401; TR- ANKARA [telefax + +90 4 3593430]
MET	Bandirma Meteo (YMB 20) 3635 6966
MET	Samsun Meteo (YMY) 6964
MIL	FF Incirlik ('RFFVAT') **7994.2 14670.2 17480.2**

NAV	TN Ankara (TBA/TBB) 139 3780 3795.5 4260 4275 4350 5045 6382 6395 6502 8493 8555 8572
NAV	TN Izmir (TBH/TBO) 2625 2645 3358 6375 6480.5 8505
PRS	AA Ankara **8137.4 18040** = Anadolou Ajansi; Genel Müdürlük; POB 450; TR-ANKARA
PTT	TGM Istanbul; Bölge BasMüdürlügü; Teknik Isler; TR- ISTANBUL

TURKMENISTAN

TKM / EZ / see Russian Federation / UTA / 43C7

MAR	Krasnovodsk R (EZM) 3170
XXX	TALEBAN Mary **14365.7**

TURKS AND CAICOS ISLANDS

TCA / see United Kingdom / 78118 / MKGT MKJT MKM-MKN MKPI MKPV MKSC MKSY / 116H4

AIR	Grand Turk Air = Director of Civil Aviation; POB 168; GRAND TURK

TUVALU

TUV / T2 / 91630-91649 / NGF / 9C8

AIR	Funafuti Air = Ministry of Works and Communication; Vaiaku; FUNAFUTI
MAR	Funafuti Island R 4387 = (reception reports to PTT Funafuti)
PTT	PTT Funafuti = Posts and Telecommunications Division; Vaiaku; FUNAFUTI

UGANDA

UGA / 5X / 63602-63726 / HU / 93C4

AIR	Kampala Air = Ministry of Transport; Directorate of Civil Aviation; POB 5536; KAMPALA
DIP	Algerian E Kampala **18944.5**

UKRAINE

UKR / EM-EO UR-UZ / 33000-34999 / UK / 46G5

AIR	Kiyev Air 6617
DIP	Bulgarian E Kiyev ('KIT') **10248 13418**
DIP	Czech E Kiyev **14362**
DIP	Polish E Kiyev **8166**
MAR	Feodosiya R (UTM) 6370 17014
MAR	Izmail R (USO) 4277 4393 6386.5 6513 8586 8618 8770 12965 = Danube Shipping Company; 2 Pr. Suvorova; POB 60; 272630 IZMAIL
MAR	Kerch R (URK) 6487 8616.5 12835 17177
MAR	Kherson R (USI) 6432 (UXL) 1692
MAR	Kiyev R (UTQ) 6416 6420 8635 8782 12715 13055 13125 13158 17015 17135 17308 (UWS) 6465 8570.5 12695.5
MAR	Mariupol R = ASCO; Radiocentre Manager; 341010 MARIUPOL (USU) 3190 4265 4351 6315.5 6326.5 6355 6477.5 **8422.5 8540 8620 8607 12584.5 12615 12627.5 12697** 12711 12732 **16829 16893 17085 17141.6 22395 22527** 22641 (UTW) 2805 4393 13143 17362

MAR	Odessa R (URM) 6415.5 12675 16869 (UTT) 3310 8707 13089 17308 22699 22747 (UUI) 4230 4330 **6317 6319** 6341.5 **6353** 6447 **8417.5 8520** 8528.5 8593 **8643.5 12583.5** 12760 **12947** 12950 12997.5 **13041** 13197 **16857.5** 16947 **17049** 17063 17155 **17177** 17401 22393 **22405 22464** 22555
MAR	Sevastopol' R (RUF) 4266 8450 12610.5 (URL) 2695 6383 8470 8580 8614 **12735** 12876 12970 12977 12993 17038.5 **17147** 17153 17228 22530 **22560** 22576.5 22635.5
MAR	Taganrog R (UWT) 2525
MAR	Yalta R (UWD) 2464 (UWY) 6501 8706.4 17064 22747
MET	Kiyev Meteo (RJK/RPN) *3360 6950*
XXX	Beacon Odessa ('D') 10871.7 17015.7

UNITED ARAB EMIRATES

UAE / A6 / 41180-41239 / OM / 33K5

AIR	Abu Dhabi Air = Ministry of Communications; Directorate General of Civil Aviation; POB 900; ABU DHABI
CY	DB27 oil rig **4112.9**
CY	Jebel Ali **4112.9**
DIP	Egyptian E Abu Dhabi **14506.7**

UNITED KINGDOM

G / G M VP-VS ZB-ZJ ZN-ZO ZQ 2 / 03000-03949 / EG / 54

AF	RAF Edinburgh (MKL) 82.8 2429 4731 6697 6758 8987 11212 = RAF Pitreavie Castle; HF SAR Communications; RCC Edinburgh; DUNFERMLINE KY11 5QF; Scotland
AF	RAF London (MKK) **5405 5812.5 6788.5 7455 7710 8085 9337.5 10129.5 10200 10280 10654 11550 12110.5 12130.5 12145 13880 14432.5 14445 14502.5 15715 16040** (MVU) 4715 11253
AF	RAF Upavon (MQP) 4540 4742 5714 6739 9031 11205 11234 11247 18018 = RAF Upavon; HQ 1 Group; Commanding Officer; PEWSEY SN9 6BE
AF	many RAF stations 8984
AF	USAF Croughton (AJE) 4724 6712 6730 6739 9011 9160 11181 11226 11229 11244 13200 15016 17976 = (reception reports to Department of the Air Force; Headquarters United States Air Forces in Europe; Directorate of Weather; Chief, Operations and Stan/Eval; Unit 3050; Box 500; APO AE 09094; USA)
AIR	London Air = Civil Aviation Authority Headquarters; CAA House; 45-59 Kingsway; LONDON WC2B 6TE
AIR	Plymouth Rescue R = (reception reports to Southern Rescue Coordination Centre; Mount Wise; Richmond Walk; PLYMOUTH PL1 4JH)
AIR	Portishead Air (GKX) 4807 8170 8181 8960 10291 12133 14890 15964 16273 18210 19510 20065 23142 25109 = (reception reports to Portishead R)
AIR	Shanwick Air (reception reports to National Air Traffic Services; Scottish & Oceanic ATC Control Centres; Duty Signals Officer; Atlantic House; Sherwood Road; PRESTWICK KA9 2NR)
DIP	Egyptian E London **6662.7 10307.7 11023.7 13486.7**
DIP	MFA London = Foreign and Commonwealth Office Hanslope Park; Diplomatic Wireless Service; Central Receiving Station; HANSLOPE MK19 7BH
DIP	Nigerian E London **19357**
DIP	Polish E London **7786 10113**
DIP	Spanish E London **18597.5**
DIP	Swedish E London (SAM 26) **12227**

MAR	Cullercoats R (GCC) 1731 2719 = BT Radio Station; WHITLEY BAY NE26 2PD
MAR	Humber R (GKZ) 1869 1925 2684 2810 **3607.3** = BT Radio Station; Trusthorpe; MABLETHORPE LN12 2PH
MAR	Jersey R = Department of Electronics; State's Airport; Officer-in-charge; SAINT PETER, Jersey, Channel Islands
MAR	Land's End R (GLD) 2670 2782 3610 = BT Radio Station; Officer in Charge; Skewjack, St. Levan; PENZANCE TR19 6NB [telefax ++44 1736 871684]
MAR	Niton R (GNI) 1641 2628 4360 8773 8809 17284 = BT Radio Station; Officer-in-charge; Dean, Whitwell Road; VENTNOR PO38 2AB
MAR	Norwick R (GNK) **2832.7** = (reception reports to Portishead R)
MAR	Portishead R (GK/GPA) **3542.7 3615.7 4211 4251.5 4256 4267.9 4274 4286 4314.5 4316 4317.5 4326.5 4336 4372 4384 4432 6315 6319.5 8417 8516 8545.9 8552 8559.5 8569 8581.6 8591.5 8604 8606 8684 8722 8764 8782 8794 12580 12603 12607 12714 12788.5 12790 12791.5 12815 12822 12835.4 12858 12871.5 13006.5 13019.8 13077 13080 13092 13146 13158 13164 13170 16807.5 16824 16840 16918.8 16954.4 16974.6 17072 17092 17098.4 17113 17136.8 17151.2 17167.5 17245 17257 17272 17293 17308 17335 17350 17359 19755 19761 22377 22393 22409 22448.7 22467 22494 22503 22525.5 22527 22528.5 22545 22711 22729 22735 22753 22774 22780 22813** = British Telecom; Portishead Radio Station; Radio Officer; Worston Lane; Burnham-on-Sea; HIGHBRIDGE TA9 3JY [telefax ++44 1278 792145]
MAR	Saint Helier R, Jersey 1659
MET	Bracknell Meteo (GFA/GFL) *2618.5* **4489** *4610* **6835** *8040* **10551.3 14356** *14436* **18230** *18261* = Ministry of Defense; Air Force Department; Bracknell Meteorological Office; Met. O5b; London Road; BRACKNELL RG12 2SZ [telefax ++44 1344 854018]
MIL	BA London (GXQ) **4500 7390 7680 7776.5 7960 8110 9435 10348 10855 10890 10904 11016.4 11411.5 12115 13839 14381 16273.3**
NAV	RN Crimond **73.3**
NAV	RN Faslane (MGJ) **2892.3 3390 4258.3 4322 6336.3 6362 8642.2 8672.8 9130 12921.2 17055 19860**
NAV	RN London = Royal Navy; Operations Office; Communications Centre Whitehall; Operations Office; Chief Radio Supervisor; Old Admiralty Buildings; Spring Gardens; Whitehall; LONDON SW1A 2BE [telefax ++44 171 2186415] (GYA) **2892.3** *3652* **3795 4258.3** *4307* **4568.8 5400 6336.3 6436** *6452.5* **7657** *8331.5* **8672.8 9060 9130 9485 10966 12905.9 13784 16918.2** (GYE) **9147**
NAV	RN Plymouth (MTI) **2815 3436 4274 6435.5 8494 12741**
NAV	RN Portland (GXW) **6688 8993**
NAV	RN Preston **3134.9 6434.4 12740 16936.9**
PTT	British Telecom; Holborn Centre; 120 Holborn; LONDON EC1N 2TE
TSF	Rugby TS (MSF) 60 = Royal Greenwich Observatory; Time Department; Herstmonceux Castle; HAILSHAM BN27 1RP

UNITED NATIONS ORGANIZATION

ONU / 4U / - / - / -

UNITED STATES OF AMERICA

USA / AA-AL K N W / 72000-72999 74000-74999 / K / 102

AF	USAF Andrews AFB, Camp Springs, MD (AFA) 4721 4724 4742 5437 5710 6683 6712 6715 6730 6739 6756 6761 6812 6817 6830 6993 7605 7693 7813 7919 7997 8026 8029 8032 8040 8964 8968 9011 9014 9016 9023 9043 9057 9270 9320 10589 11052 11055 11058.5 11181 11214 11220 11226 11229 11244 11460 11466 13203 13209 13242 13248 13440 15010 15016 17976

AF	USAF AWS Offutt AFB, Omaha, NE (AFS) **3228** *3232* **5904** *5908* = (reception reports to USAF Offutt AFB, Omaha, NE)
AF	USAF Cape Canaveral, FL (AFE 70) 2622 3041 3120 3187 3365 4510 4900 4992 5246 5711 6937 7765 9043 11548
AF	USAF MacDill AFB, Tampa, FL (AFE) 4725 4745 5688 5710 6715 6730 6739 6757 8964 8968 9014 9016 11181 11217 11226 11229 11244 11460 13203 13209 13244 15016 15043 17976 18018 = United States Air Force Global Aeronautical Station; McDill Air Force Base; Communications Station AFE; 1928th Communication Group / AFCC; Commanding Officer; TAMPA, FL 33608-6345
AF	USAF MARS Fort Meade, MD (AAA 3USA) **10815.5**
AF	USAF MARS Fort Sam Houston, TX (AAA 6USA) **10815.5**
AF	USAF McClellan AFB, Sacramento, CA (AFI) 4724 4745 6712 6715 6730 6739 8050 8968 9014 9016 9057 11181 11226 11244 13200 13209 13242 13248 15016 17976 = USAF McClellan AFB; Officer-in-Charge; MCCLELLAN AFB, CA 95652-5000
AF	USAF Offutt AFB, Omaha, NE (AFS) 4724 6712 6730 6739 8968 9016 11217 11226 11244 13209 15016 17976 = Department of the Air Force; Detachment 1; 755th Communications Squadron (ACC); 21011 Rainwood Road; ELKHORN, NE 68022
AF	many CAP stations 4469 4585 4604 4627
AF	many USAF MARS stations (AFA 3) 4517 (AFA 7) 3917.5 (-) 4577 13927
AF	many USAF stations 8989 8992 11175
AIR	Miami Air, FL = Aeronautical Radio Inc; Area Manager; 5391 N.W. 36th Street; MIAMI SPRINGS, FL 33166
AIR	New York Air, NY = New York International Flight Service Station; Air Traffic Manager; 150 Arrival Avenue; Long Island MacArthur Airport; RONKONKOMA, NY 11779
AIR	San Francisco Air, CA = Department of Transportation; Federal Aviation Administration; Flight Service Station; Airport Station; POB 2368; OAKLAND, CA 94614
AIR	Washington Air, DC = Federal Aviation Administration; 800 Independence Avenue Southwest; WASHINGTON, DC 20590
CG	USCG Boston = (reception reports to Department of Transportation; US Coast Guard Communication Station Boston (NMF); Commanding Officer; 900 Ferry Street; MARSHFIELD, MA 02050-1800 [telefax ++1 301 7638592; *http://www.dot.gov/dotinfo/uscg/pacarea/camspac/NMFfaxsked.html*]) (NIK) 5320 (NMF) 4426 **6314** *6340.5* 6501 6513 **8416.5** 8764 *9110* 11202 **12579** *12750* 13089 **16806.5**
CG	USCG Miami, FL (NMA) 8764
CG	USCG New Orleans, LA (NMG) 3122 *4316* 4426 5237.5 5320 *8504* 8764 11202 *12790* 13089 *17148*
CG	USCG Portsmouth (NMN) 3122 4426 **6316** 6501 8428 8764 11202 **12592.5** 13089 **16819.5** = (reception reports to USCG CAMSLANT - NMN; Commanding Officer; c/o NAVSECGRUANT Northwest; CHESAPEAKE, VA 23322-2598 [telefax ++1 804 4216215])
CG	USCG San Francisco, CA (NMC) 3122 *4346* 4426 6501 **8416.5** *8682* 8764 **12585** *12730* 13089 **16806.5** **16812.5** *17151.2* 17314 **22376** *22527* = United States Coast Guard Communications Area Master Station Pacific San Francisco; Operations Department; Commanding Officer; 17000 Sir Francis Drake Boulevard; POB 560; POINT REYES STATION, CA 94956-0560 [telefax ++1 415 6692096], or for the fax charts: National Weather Service; MFB; WWBG Room 410; 5200 Auth Road; WASHINGTON, DC 20223 [telefax ++1 301 7638592; *http://www.dot.gov/dotinfo/uscg/pacarea/camspac/NMCfaxsked.html*]

CG	many USCG stations (NM) 2670 (N) 5696 (-) 8983
CY	many oil rig stations 4637.5
DIP	Egyptian E Washington, DC (KNY 29) 10031.7 14501.7
DIP	Turkish E Washington, DC 10433
MAR	Cape Elizabeth R, ME (KTD) 2506
MAR	Chatham R, MA (WCC) 4216.5 4238 4268 4331 6324 6333.5 6337 6376 8423 8424 8426.5 8586 8630 12598 12847 12925.5 12961.5 13033.5 16817 16825 16904.9 16933.2 16972 16973.5 22386.5 22518 22521 22640 22658 = Chatham Radio WCC; Manager; POB 397; NORTH CHATHAM, MA 02650-0397
MAR	Delcambre R, LA (KGN) 2506 4366 8716 13182 17374
MAR	Dixon R, CA (KMI) 2450 2506 4357 4402 4405 8728 8743 8758 8782 13077 13080 13083 13161 13164 17245 17248 17287 17311 22735 22762 22777 22801 = (reception reports to American Telephone and Telegraph Company; KMI High Seas Radiotelephone; Station Manager; 18500 Sir Francis Drake Boulevard; POB 9; INVERNESS, CA 94937)
MAR	Jeffersonville R, IN (WFN) 2782 6513 8725
MAR	Miami R, FL (WOM) 2442 2490 2514 2566 4363 4390 4405 4423 8722 8731 8746 8758 8791 8809 13092 13098 13101 13119 13143 13164 17242 17266 17269 17272 17287 22738 22741 22759 = (reception reports to American Telephone and Telegraph Company; Station WOM; 1340 N.W. 40th Avenue; FORT LAUDERDALE, FL 33313)
MAR	Mobile R, AL (WLO) 2055.5 2572 4213 4215 4217 4250 4257.5 4343 4351 4369 4396 4411 6317 6319 6321 6323 6325.5 6344 6416 6446.5 6519 8419 8421 8430.5 8432 8434 8445.5 8473.5 8514 8534 8658 8713 8788 8803 8806 12581.5 12584.5 12586.5 12591.5 12593.5 12596 12599 12604.5 12606 12609.5 12660 12704.5 12886.5 12992 13024.9 13110 13149 13152 13173 13179 16809 16812 16814 16818.5 16820.5 16826 16828 16831 16836.5 16969 16997.6 17022.5 17173.5 17260 17362 17368 17380 19685.5 19773 22381 22383.5 22403 22406 22407 22412 22418 22487 22686.5 22804 22819 22831 26123 26135 26144 26151 = Mobile Marine Radio Inc; 7700 Rinla Avenue; MOBILE, AL 36619-1199
MAR	Ocean Gate R, NJ (WOO) 4212.5 4384 4387 4402 4420 8740 8749 8761 8794 13083 13104 13107 13158 17254 17299 17317 17332 22696 22708 22723 22801 = (reception reports to American Telephone and Telegraph Company; Station WOO; End of Beach Avenue; POB 550; MANAHAWKIN, NJ 08050)
MAR	Rogers City R, MI (WLC) 2514 2550 2582 4212 4369 4381 4408 6316 8794 = Central Radio and Telegraph Company; Port of Caleite; ROGERS CITY, MI 49779
MAR	San Francisco R (KFS) 2037.5 2061.5 2566 4210.5 4211.5 4228 4274 4435 6314.5 6315.5 6348 6365.5 8417.5 8444.5 8445 8558.4 12579.5 12580.5 12695.5 12844.5 13176 16820 17026 17184.8 17377 19767 22377.5 22515 22581.5 22825 26145 = KFS Globe Wireless; Engineering Department; 1 Meyn Road; POB 56; HALF MOON BAY, CA 94019 [telefax ++1 415 7268604; *http://www.globewireless.com/*] (KPH) 2045 4216 4247 6320 6324 6324.5 6477.5 6488.5 8422.5 8427 8618 8642 12585.5 12589.5 12590 12593 12600 12808.5 13002 16813 16817.5 17016.5 17088.8 22382.5 22395 22477.5 22479 22557 = MCI International Inc; San Francisco Radio / KPH; 17400 Sir Francis Drake Boulevard; POINT REYES STATION, CA 94956
MAR	Seattle R, WA (KLB) 2063 4348.5 6318 6410.7 8425 8582.5 12590.5 12917 17007.7 22539 = Seattle Radio Inc; KLB; POB 922; MARYSVILLE, WA 98270

MAR	Slidell R, LA (WNU) 2048 2558 4210.5 4435 **6327** 6389.7 6499.9 8425.5 8525 8570 8688 **12607.5** 12826.5 12869 13011 13185 16816 16834.5 17038 17117.6 17239.7 17371 19764 **22385.5** 22458 22575.5 22828 26148 = WNU Globe Wireless; Engineering Department; 1 Meyn Road; POB 56; HALF MOON BAY, CA 94019 [telefax ++1 415 7268604; *http://www.globewireless.com/*]
MAR	Tuckerton R, NJ (WSC) 4316 6484.5 8664 8680 12879.5 13063.5 16916.5 17106.5 = Tuckerton Radio WSC; Murphy Drive; POB 386; WEST CREEK, NJ 08092
MAR	Withamsville R, OH (WCM) 2086 2782 6510 12233 16417
MAR	common coast and ship stations simplex frequency 4125
MET	NOAA Washington, DC = US Department of Commerce; National Oceanic and Atmospheric Administration; National Weather Service; Communications Division; Chief; SILVER SPRING, MD 20910 [telefax ++1 301 7638449; *http://www.nws.noaa.gov/*]
MIL	USA MARS Fort Meade, MD (AAA 3USA) **5205 6825 16041**
MIL	USA MARS Columbia, SC (AAR 4USD) **16041**
MIL	many USACE stations 5400 9122.5 12070 16077
MIL	many USA MARS stations 4020 4024 4035
MOI	many FEMA stations (WGY 9) 5211 6809 10493 10590 12216 13446
NAV	USN MARS Cheltenham, MD (NNN 0MDC) **14935.5**
NAV	USN MARS Manchester, NH (NNN 0MDA) **8092 14761.5**
NAV	USN MARS Mayport, FL (NNN 0MDF) **10259.5**
NAV	USN MARS Nazareth, PA (NNN 0GKF) **14761.5**
NAV	USN Norfolk, VA (NAM) *3357 8080 10865 15959 20015* = Naval Atlantic Meteorology and Oceanography Center; Operations Officer; 9141 Third Avenue; NORFOLK, VA 23511-2394 [telefax ++1 804 4444479]
NAV	USN San Francisco, CA (NPG) *6453 9090*
NAV	many USN MARS stations 4041 7391.5 8031.5 14391.5 14415 14467 14470 14818.5
NAV	many USN stations 7535
TSF	Fort Collins TS, CO = Station WWV; Engineer-in-charge; Route 2; Box 83-E; FORT COLLINS, CO 80520 (WWV) 2500 5000 10000 15000 20000 (WWVB) 60
UNO	UNO New York, NY **14642**
XXX	VoA Greenville feeder, NC 6873 7651 10454 19379 [*http://www.voa.gov/*]

URUGUAY

URG / CV-CX / 86300-86599 / SU / 121F4

AIR	Montevideo Air = Direccion General de Infrastructura Aeronautica; Division Telecomunicaciones Aeronauticas; Aerupuerto Internacional de Carrasco; CANELONES
MAR	Cerrito R (CWA) 4346 6435.5 8602 12750 17230 22694 = (reception reports to ANTEL Montevideo)
MAR	Punta Carretas R (CWF) 2768.5 4357 6513 8812 13104 17269 22735
NAV	UN Montevideo (CXR) **10177.3**
PTT	ANTEL Montevideo = Administracion Nacional de Telecomunicaciones; Departemento de Transmision; Jefe Ingeniero; Colonel Brandzen 1961; Piso 12, Esc. 1201; MONTEVIDEO

UZBEKISTAN

UZB / UJ-UM / 38000 - 38999 / UTE-UTZ / 43F5

MET	Tashkent Meteo (various call signs) *3280* **3750** *4365 5285* **5430** *5890 7570 8083 9150 9340* **10130** *13947 14982.5 16166 18680*
TSF	Tashkent TS (RCH) 2500 5000 10000

VANUATU VUT / YJ / 91550-91569 / NV / 9A10

AIR Port-Vila Air = Ministry of Transport and Communications; Civil Aviation Department; PORT-VILA
MAR Port-Vila R (YJM) 2168 4343 4384 6344 8502 8770 12678 = (reception reports to PTT Port-Vila)
PTT PTT Port-Vila = Telecom Vanuatu Ltd; POB 146; PORT-VILA

VATICAN CITY STATE CVA / HV / - / - / 79A5

VENEZUELA VEN / YV-YY 4M / 80400-80799 / SV / 119E4

AIR Caracas Air = Direccion de Aeronautica Civil; Parque Central; Torre Este, Piso 32; Avenida Lecuna; CARACAS 1010
DIP Indonesian E Caracas **18511.5**
MAR La Guaira R (YVG) 2120 6351.5 8461 12817.5 17141.6 = Ministerio de Comunicaciones; Direccion de Telecomunicaciones; Estacion Costera de Arrecifes; Jefe de Estacion; LA GUAYRA
TSF Caracas TS (YVTO) 5000 = Observatorio Cagigal; Apartado 6745; La Planacie; CARACAS

VIET NAM VTN / XV 3W / 48000-48920 / VV / 25H3

AIR Hanoi Air = General Civil Aviation Administration; Directorate General; 25 Trang Thi; HANOI
DIP Algerian E Hanoi **9352.3 18529.5**
DIP Cuban E Hanoi (CLP 22) **17428 18422 20042 20870**
DIP Swedish E Hanoi (SAM 59) **17428.9 18187.5**
MAR Can Tho R (XVU) 2073 6513
MAR Da Nang R (XVT) 8570 8755
MAR Hai Phong R (XVG) 2696 2814 8470 8645 8785 12820 16945 = (reception reports to DGPT Hanoi)
MAR Ho Chi Minh Ville R (XVS) 4396 8590 8678 13042.5 16950 16956 = (reception reports to DGPT Hanoi)
MAR Nha Trang R (XVN) 6522 8694 = (reception reports to DGPT Hanoi)
MAR Quang Yen R (XVQ) 8480
MAR Vung Tau R (XVR) 2653 4399 6522 = (reception reports to DGPT Hanoi)
PRS VNA Hanoi (XVN) **10600 15744.5 18264** = Viet-Nam Thong Tan Xa; HANOI
PTT DGPT Hanoi = Direction Generale des Postes et Telecommunications; Duty Director of Telecommunications Department; 18 Nguyen Du Street; HANOI

VIRGIN ISLANDS (BRITISH) VRG / see United Kingdom / 78550-78559 / TU / 105L7

VIRGIN ISLANDS (UNITED STATES) VIR / see United States of America / 78543-78547 / TI / 105L7

MAR Saint Thomas R (WAH) 2506 2585 = (reception reports to ITT Saint Thomas)
PTT ITT Saint Thomas = ITT Communications Inc; Charlotte Amalie; POB 3768; SAINT THOMAS 00801

WAKE ISLAND WAK / see United States of America / 91245 / PW / 9A6

WALLIS AND FUTUNA ISLANDS WAL / see France / 91750-91754 / NL / 10R4

WORLD METEOROLOGICAL ORGANIZATION - / C7 / - / - / -

YEMEN YEM / 7O / 41320-41499 / OY / 33E9

AIR	San'a Air 7595 = Ministry of Communications; Civil Aviation and Meteorology Authority; International Airport; POB 1438; SAN'A
AIR	YEMENIA San'a 9115
DIP	Egyptian E San'a 18251.7
MAR	Aden R (7OA) 2595 3628 4390 8441.4 8773 13060.5 17175.2 = (reception reports to YEMENTEL Aden)
MAR	Al Hudaydah R (4WD) 4230 8588 12855.8
PTT	YEMENTEL Aden = Yemen Telecommunications Corp; Radio Regulatory Division; General Manager; POB 1256; Tawahi; ADEN

ZAIRE ZAI / 9O-9T / 64000-64379 / FZ / 84G6

AIR	Kinshasa Air = Regie des Voies Aeriennes; Direction Generale; Administration Centrale; Direction d'Exploitation Aeronautique; Aeroport International de N'Djili; BP 6574; KINSHASA-NDOLO
CY	BDZ Goma 18032.5
CY	EKDMC Mbuji-Mayi 10505.3
DIP	Egyptian E Kinshasa 20304.7
DIP	French E Kinshasa ('KHSA') 20095.4
DIP	Nigerian E Kinshasa 19357
DIP	Polish E Kinshasa 15792
DIP	Portuguese E Kinshasa 21182
IRC	ICRC Goma 13963.5
IRC	ICRC Kinshasa 13998
MAR	Banana R (9PA) 2192 4357 4381 8445 8546 8752 8761 8776 12660 13155 17184.8 17356 = Regie des Voies Maritimes; Station Cotiere Banana-Radio; Chef de Station; BP 5; BANANA
XXX	Goma 14050 16216
XXX	PSF Goma 18895
XXX	PSF Kinshasa 14365.5

ZAMBIA ZMB / 9I-9J / 67400-67999 / FL / 92B9

AIR	Lusaka Air = Department of Civil Aviation; Director of Civil Aviation; POB 50137; LUSAKA
DIP	Egyptian E Harare 19036.7
XXX	ZFDS Ndola 5430

ZIMBABWE ZWE / Z2 / 67400-67999 / FV / 92C11

AIR	Harare Air = Department of Civil Aviation; Sarum House; 78 Manica Road; Private Bag 7716; HARARE
DIP	Egyptian E Harare 19818.7 ☺

5 Identification of stations

Section I - General provisions

RR 2055 All transmissions shall be capable of being identified either by identification signals or by other means.

RR 2055.1 In the present state of technique, it is recognized nevertheless that the transmission of identifying signals for certain radio systems (e.g. radiodetermination, radio relay systems and space systems) is not always possible.

RR 2056 All transmissions with false or misleading identification are prohibited.

RR 2057 Where practicable and in appropriate services, identification signals should be automatically transmitted in accordance with relevant CCIR Recommendations.

RR 2058 All transmissions in the following services should, except as provided in RRs 2066 to 2068, carry identification signals:

RR 2059 a) amateur service;

RR 2060 b) broadcasting service;

RR 2061 c) fixed service in the bands below 28000 kHz;

RR 2062 d) mobile service;

RR 2063 e) standard frequency and time signal service.

RR 2064 All operational transmissions by radiobeacon stations shall carry identification signals. However, it is recognized that, for radiobeacons and for certain other radionavigation services that normally carry identification signals, during periods of malfunction or other non-operational service the deliberate removal of identification signals is an agreed means of warning users that the transmission cannot safely be used for navigational purposes.

RR 2065 When identification signals are transmitted they shall comply with the previsions of this Article.

RR 2066 However, the requirements for certain transmissions to carry identification signals need not apply to:

RR 2067 a) survival craft stations when transmitting distress signals automatically;

RR 2068 b) emergency position-indicating radiobeacons.

RR 2069 In transmissions carrying identification signals a station shall be identified by a call sign ... or by other recognized means of identification which may be one or more of the following: name of station, location of station, operating agency, official registration mark, flight identification number, selective call number or signal, selective call identification number or signal, characteristic signal, characteristic of emission or other clearly distinguishing features readily recognized internationally.

RR 2070 For transmissions carrying identification signals, in order that stations may be readily identified, each station shall transmit its identification as frequently as practicable during the course of transmissions, including those made for tests, adjustments or experiments. During such transmissions, however, identification signals shall be transmitted at least hourly, preferably within the period from five minutes before to five minutes after the hour (UTC) unless to do so would cause unreasonable interruption of traffic, in which case identification shall be given at the beginning and end of transmissions.

RR 2071 Identification signals shall wherever practicable be in one of the following forms:

RR 2072 a) speech, using simple amplitude or frequency modulation;

RR 2073 b) international Morse code transmitted at manual speed;

RR 2074 c) a telegraph code compatible with conventional printing equipment;

RR 2075 d) any other form recommended by the CCIR.

RR 2076 To the extent possible the identification signal should be transmitted in accordance with relevant CCIR Recommendations.

RR 2077 Administrations should ensure that wherever practicable superimposed identification methods be employed in accordance with CCIR Recommendations.

RR 2078 When a number of stations work simultaneously in a common circuit, either as relay stations, or in parallel or different frequencies, each station shall, as far as practicable, transmit its own identification or those of all the stations concerned.

RR 2079 Administrations shall ensure, except in the cases mentioned in RRs 2066 to 2068, that all transmissions not carrying identification signals can be identified by other means when they are capable of causing harmful interference to the services of another administration operating in accordance with these Regulations.

RR 2080 Administrations shall, having regard to the provisions of these Regulations relating to the notification of assignments for recording in the Master Register, adopt their own measures to ensure compliance with the provisions of RR 2079.

RR 2081 Each Member reserves the right to establish its own measures for identifying its stations used for national defence. However, it shall use, as far as possible, call signs recognizable as such, and containing the distinctive characters of its nationality.

Section II - Allocation of international series and assignment of call signs

RR 2082 All stations open to the international public correspondence service, all amateur stations, and other stations which are capable of causing harmful interference beyond the boundaries of the country to which they belong, shall have call signs from the international series allocated to each country as given in the Table of Allocation of International Call Sign Series in Appendix 42 (see chapter 6 of this reference book.)

RR 2086 Between administrative radio conferences, the Secretary-General is authorized to deal with questions relating to changes in the allocation of series of call signs, on a provisional basis, and subject to confirmation by the following conference ...

RR 2089 Each country shall choose the call signs ... from the international series allocated or supplied to it; and shall, in accordance with Article 26, notify this information to the Secretary-General together with the information which is to appear in Lists I, II, IV, V, VI and VIII A. These notifications do not include call signs assigned to amateur and experimental stations.

RR 2091 The Secretary-General shall ensure that the same call sign ... is not assigned more than once and that call signs which might be confused with distress signals, or with other signals of the same nature, are not assigned.

RR 2092 When a fixed station uses more than one frequency in the international service, each frequency may be identified by a separate call sign used solely for this frequency.

RR 2093 When a broadcasting station uses more than one frequency in the international service, each frequency may be identified by a separate call sign used solely for this frequency or by some other appropriate means, such as announcing the name of the place and frequency used.

RR 2094 When a land station uses more than one frequency, each frequency may, if desired, be identified by a separate call sign.

RR 2095 Where practicable, coast stations should use a common call sign for each frequency series.

RR 2095.1 By "frequency series" is meant a group of frequencies each of which belongs to one of the different bands between 4000 kHz and 27500 kHz that are allocated exclusively to the maritime mobile service.

Section III - Formation of call signs

RR 2096 The twenty-six letters of the alphabet, as well as digits in the cases specified below, may be used to form call signs. Accented letters are excluded.

RR 2097 However, the following combinations shall not be used as call signs:

RR 2098 a) combinations which might be confused with distress signals or with other signals of a similar nature;

RR 2099 b) combinations reserved for the abbreviations to be used in the radiocommunication services (see Appendices 13 and 14);

RR 2100 c) for amateur stations, combinations commencing with a digit when the second character is the letter O or the letter I.

RR 2101 Call signs in the international series are formed as indicated in RRs 2102 to 2122. The first two characters shall be two letters or a letter followed by a digit or a digit followed by a letter. The first two characters or in certain cases the first character of a call sign constitute the nationality identification.

RR 2101.1 For call sign series beginning with B, F, G, I, K, M, N, R and W, only the first character is required for nationality identification. In the cases of half series, the first three characters are required for nationality identification.

RR 2102 Land and fixed stations

RR 2103 • two characters and one letter, or

• two characters and one letter followed by not more than three digits (other than the digits 0 and 1 in cases where they immediately follow a letter).

RR 2104 However, it is recommended that, as far as possible, the call signs of fixed stations consist of:

• two characters and one letter followed by two digits (other than the digits 0 and 1 in cases where they immediately follow a letter).

RR 2105 Ship stations

RR 2106 • two characters and two letters, or

• two characters, two letters and one digit (other than the digits 0 or 1).

RR 2107 However, ship stations employing only radiotelephony may also use a call sign consisting of:

• two characters (provided that the second is a letter) followed by four digits (other than the digits 0 and 1 in cases where they immediately follow a letter), or

• two characters and one letter followed by four digits (other than the digits 0 and 1 in cases where they immediately follow a letter).

RR 2108 Aircraft stations

RR 2109 • two characters and three letters.

RR 2110 Ship's survival craft stations

RR 2111 • the call sign of the parent ship followed by two digits (other than the digits 0 and 1 in cases where they immediately follow a letter).

RR 2112 Emergency position-indicating radiobeacon stations

RR 2113 • the Morse letter B and/or the call sign of the parent ship to which the radiobeacon belongs.

RR 2114 Aircraft survival craft stations

RR 2115 • the complete call sign of the parent aircraft (see RR 2109), followed by a single digit other than 0 or 1.

RR 2116 Land mobile stations

RR 2117 • two characters (provided that the second is a letter) followed by four digits (other than the digits 0 and 1 in cases where they immediately follow a letter); or

• two characters and one or two letters followed by four digits (other than the digits 0 and 1 in cases where they immediately follow a letter).

RR 2118 Amateur and experimental stations

RR 2119 • one character (see RR 2101.1) and a single digit (other than 0 or 1), followed by a group of not more than three letters, or

• two characters and a single digit (other than 0 or 1), followed by a group of not more than three letters.

RR 2120 However, the prohibition of the use of the digits 0 and 1 does not apply to amateur stations.

RR 2121 Stations in the space service

RR 2122 When call signs for stations in the space service are employed it is recommended that they consist of:

• two characters followed by two or three digits (other than the digits 0 and 1 in cases where they immediately follow a letter).

Section IV - Identification of stations using radiotelephony

RR 2123 Stations using radiotelephony shall be identified as indicated in RRs 2124 to 2133.

RR 2124 Coast stations

- a call sign (see RR 2103); or
- the geographical name of the place as it appears in the List of Coast Stations, followed preferably by the word RADIO or by any other appropriate indication.

RR 2125 Ship stations

- a call sign (see RRs 2106 and 2107); or
- the official name of the ship preceded, if necessary, by the name of the owner on condition that there is no possible confusion with distress, urgency and safety stations; or
- its selective call number or signal.

RR 2126 Ship's survival craft stations

- a call sign (see RR 2111); or
- a signal of identification consisting of the name of the parent ship followed by three digits.

RR 2127 Emergency position-indicating radiobeacon stations
When speech transmission is used (see RR 3265):

- the name and/or the call sign of the parent ship to which the radiobeacon belongs.

RR 2128 Aeronautical stations

- the name of the airport or geographical name of the place followed, if necessary, by a suitable word indicating the function of the station.

RR 2129 Aircraft stations

- a call sign (see RR 2109), which may be preceded by a word designating the owner or the type of aircraft; or
- a combination of characters corresponding to the official registration mark assigned to the aircraft; or
- a word designating the airline, followed by the flight identification number.

RR 2130 In the exclusive aeronautical mobile frequency bands, aircraft stations using radiotelephony may use other methods of identification, after special agreement between governments, and on condition that they are internationally known.

RR 2131 Aircraft survival craft stations

- a call sign (see RR 2115).

RR 2132 Base stations

- a call sign (see RR 2103); or
- the geographical name of the place followed, if necessary, by any other appropriate indication.

RR 2133 Land mobile stations

- a call sign (see RR 2117); or
- the identity of the vehicle or any other appropriate indication.

Section V - Selective call numbers in the Maritime Mobile Service

RR 2134 When stations of the maritime mobile service use selective calling devices in accordance with Appendices 38 and 39, their call numbers shall be assigned by the responsible administrations in accordance with the provisions below.

RR 2135 Formation of ship station selective call numbers and coast station identification numbers

RR 2136 The ten digits from 0 to 9 inclusive shall be used to form selective call numbers.

RR 2137 However, combinations of numbers commencing with the digits 00 (zero, zero) shall not be used when forming the identification numbers for coast stations.

RR 2138 Ship station selective call numbers and coast station identification numbers in the series are formed as indicated in RRs 2139, 2140 and 2141.

RR 2139 Coast station identification numbers

- four digits (see RR 2137).

RR 2140 Ship station selective call numbers

- five digits.

RR 2141 Predetermined group of ship stations

- five digits consisting of
- the same digit repeated five times; or
- two different digits repeated alternately.

RR 2142 Assignment of ship station selective call numbers and coast station identification numbers

RR 2143 In cases where selective call numbers for ship stations and identification numbers for coast stations are required for use in the maritime mobile service and the selective calling system is in accordance with Appendix 39, the selective call numbers and identification numbers shall be supplied by the Secretary-General on request. Upon notification by an administration of the introduction of selective calling for use in the maritime mobile service:

RR 2144 a) selective call numbers for ships will be supplied as required in blocks of 100 (one hundred);

RR 2145 b) coast station identification numbers will be supplied in blocks of 10 (ten) to meet actual requirements;

RR 2146 c) selective call numbers for selective calling of predetermined groups of ship stations in accordance with RR 2141 will be supplied as required as single numbers.

RR 2147 Each administration shall choose the selective call numbers to be assigned to its ship stations from the blocks of the series supplied to it.

RR 2148 Each administration shall choose the coast station identification numbers to be assigned to its coast stations from the blocks of the series supplied to it.

Section VI - Maritime Mobile Service Identities in the Maritime Mobile Service and the Maritime Mobile-Satellite Service

RR 2149 When a station in the maritime mobile service or the maritime mobile-satellite service is required to use maritime mobile service identities, the responsible administration shall assign the identity to the station in accordance with the provisions described in Appendix 43, taking into consideration relevant CCIR and CCITT Recommendations.

Section VII - Special provisions

RR 2150 In the aeronautical mobile service, after communication has been established by means of the complete call sign, the aircraft station may use, if confusion is unlikely to arise, an abbreviated call sign or identification consisting of:

RR 2151 a) in radiotelegraphy, the first character and last two letters of the complete call sign (see RR 2109);

RR 2152 b) in radiotelephony:

- the first character of the complete call sign; or
- the abbreviation of the name of the owner of the aircraft (company or individual); or
- the type of aircraft; followed by the last two letters of the complete call sign (see RR 2109) or by the last two characters of the registration mark.

RR 2153 The provisions of RRs 2150, 2151 and 2152 may be amplified or modified by agreement between administrations concerned.

RR 2154 The distinguishing signals allotted to ships for visual and aural signalling shall, in general, agree with the call signs of ship stations.

Call sign formation possibilities

Note: The actual number of combinations may be less, in order to comply with RRs 2097 - 2100. .. represents the first two characters of allocated call sign series (see chapter 6)

Type of station	RR	Permitted formations	Combinations	Remarks
Aircraft	2109	..AAA - ..ZZZ	17576	
Aircraft survival craft	2115	p2 - p9	8 per aircraft	p = complete call sign of the parent aircraft (see RR 2109)
Amateur	2119	f0A - f9Z	260	f = first character, provided it is B, F, G, I, K, M, N, R or W (see RR 2101)
	2120	f0AA - f9ZZ	6760	
		f0AAA - f9ZZZ	175760	
		..0A - ..9Z	260	call signs commencing with a digit when the second character is the letter O or I are not permitted (see RR 2100)
		..0AA - ..9ZZ	6760	
		..0AAA - ..9ZZZ	175760	
Emergency position-indicating radio beacon	2113	B	no limit	B = Morse letter B
		p		p = call sign of the parent ship (see RRs 2106 and 2107)
		Bp		
Experimental	2119	f2A - f9Z	208	f = first character, provided it is B, F, G, I, K, M, N, R or W (see RR 2101)
		f2AA - f9ZZ	5408	
		f2AAA - f9ZZZ	140608	
		..2A - ..9Z	208	
		..2AA - ..9ZZ	5408	
		..2AAA - ..9ZZZ	140608	
Fixed	2103	..A - ..Z	26	
		..A2 - ..Z9	208	
		..A20 - ..Z99	2080	recommended, as far as possible (see RR 2104)
		..A200 - ..Z999	20800	
Land	2103	..A - ..Z	26	
		..A2 - ..Z9	208	
		..A20 - ..Z99	2080	
		..A200 - ..Z999	20800	
Land mobile	2117	.s2000 - .s9999	8000	s = second character, provided it is a letter
		..A2000 - ..Z9999	208000	
		..AA2000 - ..ZZ9999	5408000	
Ship	2106	..AA - ..ZZ	676	
		..AA2 - ..ZZ9	5408	
	2107	.s2000 - .s9999	8000	s = second character, provided it is a letter
		..A2000 - ..Z9999	208000	
Ship's survival craft	2111	p00 - p99	100 per ship	if last character of p is a digit (p = call sign of the parent ship (see RRs 2106 and 2107))
		p20 - p99	80 per ship	if last character of p is a letter
Space service	2122	..00 - ..99	100	if second character is a digit
		..000 - ..999	1000	
		..20 - ..99	80	if second character is a letter ☺
		..200 - ..999	800	

6 International call sign series

For the reverse list giving countries and the corresponding international call sign series, see chapter 4.

AA - AL	United States of America
AM - AO	Spain
AP - AS	Pakistan
AT - AW	India
AX	Australia
AY - AZ	Argentina
A2	Botswana
A3	Tonga
A4	Oman
A5	Bhutan
A6	United Arab Emirates
A7	Qatar
A8	Liberia
A9	Bahrain
B	China and Taiwan
CA - CE	Chile
CF - CK	Canada
CL - CM	Cuba
CN	Morocco
CO	Cuba
CP	Bolivia
CQ - CU	Portugal
CV - CX	Uruguay
CY - CZ	Canada
C2	Nauru
C3	Andorra
C4	Cyprus
C5	Gambia
C6	Bahamas
C7	World Meteorological Organization
C8 - C9	Mozambique
DA - DR	Germany
DS - DT	Korea (Republic of)
DU - DZ	Philippines
D2 - D3	Angola
D4	Cape Verde
D5	Liberia
D6	Comoros
D7 - D9	Korea (Republic of)
EA - EH	Spain
EI - EJ	Ireland
EK	Armenia
EL	Liberia
EM - EO	Ukraine
EP - EQ	Iran
ER	Moldavia
ES	Estonia
ET	Ethiopia
EU - EW	Belarus
EX	Kyrgyzstan
EY	Tajikistan
EZ	Turkmenistan
E2	Thailand
E3	Eritrea
F	France
G	United Kingdom
HA	Hungary
HB	Switzerland
HC - HD	Ecuador
HE	Switzerland
HF	Poland
HG	Hungary
HH	Haiti
HI	Dominican Republic
HJ - HK	Colombia
HL	Korea (Republic of)
HM	Korea (Undemocratic People's Republic of)
HN	Iraq
HO - HP	Panama
HQ - HR	Honduras
HS	Thailand
HT	Nicaragua
HU	El Salvador
HV	Vatican City State
HW - HY	France
HZ	Saudi Arabia
H2	Cyprus
H3	Panama
H4	Solomon Islands
H6 - H7	Nicaragua
H8 - H9	Panama
I	Italy
JA - JS	Japan
JT - JV	Mongolia
JW - JX	Norway
JY	Jordan
JZ	Indonesia
J2	Djibouti
J3	Grenada
J4	Greece
J5	Guinea-Bissau
J6	Saint Lucia
J7	Dominica
J8	Saint Vincent and the Grenadines
K	United States of America
LA - LN	Norway
LO - LW	Argentina
LX	Luxembourg
LY	Lithuania
LZ	Bulgaria
L2 - L9	Argentina
M	United Kingdom

N	United States of America
OA - OC	Peru
OD	Lebanon
OE	Austria
OF - OJ	Finland
OK - OL	Czech Republic
OM	Slovakia
ON - OT	Belgium
OU - OZ	Denmark
PA - PI	Netherlands
PJ	Netherlands Antilles
PK - PO	Indonesia
PP - PY	Brazil
PZ	Suriname
P2	Papua New Guinea
P3	Cyprus
P4	Aruba
P5 - P9	Korea (Undemocratic People's Republic of)
R	Russian Federation
SA - SM	Sweden
SN - SR	Poland
SSA - SSM	Egypt
SSN - ST	Sudan
SU	Egypt
SV - SZ	Greece
S2 - S3	Bangla Desh
S5	Slovenia
S6	Singapore
S7	Seychelles
S9	Sao Tome and Principe
TA - TC	Turkey
TD	Guatemala
TE	Costa Rica
TF	Iceland
TG	Guatemala
TH	France
TI	Costa Rica
TJ	Cameroon
TK	France
TL	Central African Republic
TM	France
TN	Congo
TO - TQ	France
TR	Gabon
TS	Tunisia
TT	Chad
TU	Ivory Coast
TV - TX	France
TY	Benin
TZ	Mali
T2	Tuvalu
T3	Kiribati
T4	Cuba
T5	Somalia
T6	Afghanistan
T7	San Marino
T8	Palau
T9	Bosnia and Herzegovina
UA - UI	Russian Federation
UJ - UM	Uzbekistan
UN - UQ	Kazakhstan
UR - UZ	Ukraine
VA - VG	Canada
VH - VN	Australia
VO	Canada
VP - VS	United Kingdom
VT - VW	India
VX - VY	Canada
VZ	Australia
V2	Antigua and Barbuda
V3	Belize
V4	Saint Kitts and Nevis
V5	Namibia
V6	Micronesia
V7	Marshall Islands
V8	Brunei
W	United States of America
XA - XI	Mexico
XJ - XO	Canada
XP	Denmark
XQ - XR	Chile
XS	China and Taiwan
XT	Bourkina Faso
XU	Cambodia
XV	Viet Nam
XW	Laos
XX	Portugal
XY - XZ	Myanmar
YA	Afghanistan
YB - YH	Indonesia
YI	Iraq
YJ	Vanuatu
YK	Syria
YL	Latvia
YM	Turkey
YN	Nicaragua
YO - YR	Romania
YS	El Salvador
YT - YU	Serbia and Montenegro
YV - YY	Venezuela
YZ	Serbia and Montenegro
Y2 - Y9	Germany
ZA	Albania
ZB - ZJ	United Kingdom
ZK - ZM	New Zealand
ZN - ZO	United Kingdom
ZP	Paraguay
ZQ	United Kingdom
ZR - ZU	South Africa (Republic of)
ZV - ZZ	Brazil
Z2	Zimbabwe
Z3	Macedonia
2	United Kingdom
3A	Monaco
3B	Mauritius
3C	Equatorial Guinea
3DA - 3DM	Swaziland
3DN - 3DZ	Fiji
3E - 3F	Panama

3G	Chile
3H - 3U	China and Taiwan
3V	Tunisia
3W	Viet Nam
3X	Guinea
3Y	Norway
3Z	Poland
4A - 4C	Mexico
4D - 4I	Philippines
4J - 4K	Azerbaijan
4L	Georgia
4M	Venezuela
4N - 4O	Serbia and Montenegro
4P - 4S	Sri Lanka
4T	Peru
4U	United Nations
4V	Haiti
4X	Israel
4Y	International Civil Aviation Organization
4Z	Israel
5A	Libya
5B	Cyprus
5C - 5G	Morocco
5H - 5I	Tanzania
5J - 5K	Colombia
5L - 5M	Liberia
5N - 5O	Nigeria
5P - 5Q	Denmark
5R - 5S	Madagascar
5T	Mauritania
5U	Niger
5V	Togo
5W	Samoa (Western)
5X	Uganda
5Y - 5Z	Kenya
6A - 6B	Egypt
6C	Syria
6D - 6J	Mexico
6K - 6N	Korea (Republic of)
6O	Somalia

6P - 6S	Pakistan
6T - 6U	Sudan
6V - 6W	Senegal
6X	Madagascar
6Y	Jamaica
6Z	Liberia
7A - 7I	Indonesia
7J - 7N	Japan
7O	Yemen
7P	Lesotho
7Q	Malawi
7R	Algeria
7S	Sweden
7T - 7Y	Algeria
7Z	Saudi Arabia
8A - 8I	Indonesia
8J - 8N	Japan
8O	Botswana
8P	Barbados
8Q	Maldives
8R	Guyana
8S	Sweden
8T - 8Y	India
8Z	Saudi Arabia
9A	Croatia
9B - 9D	Iran
9E - 9F	Ethiopia
9G	Ghana
9H	Malta
9I - 9J	Zambia
9K	Kuwait
9L	Sierra Leone
9M	Malaysia
9N	Nepal
9O - 9T	Zaire
9U	Burundi
9V	Singapore
9W	Malaysia
9X	Rwanda
9Y - 9Z	Trinidad and Tobago ☺

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7 Call sign list of utility stations

Listed are

- call sign (apostrophe in part 2 indicates routing indicator, or call sign not in compliance with official ITU allocations);
- name of the station, and ITU country/geographical symbol.

AAA 3USA	USA MARS Fort Meade, MD, USA
AAA 6USA	USA MARS Fort Sam Houston, TX, USA
AAR 4USD	USAF MARS Columbia, SC, USA
AFA	USAF Andrews AFB, Camp Springs, MD, USA
AFE	USAF MacDill AFB, Tampa, FL, USA
AFE 70	USAF Cape Canaveral, FL, USA
AFE 83	USAF Wideawake, ASC
AFE 86	USAF Cedar Grove, ATG
AFH	USAF Albrook AFB, Balboa, PNR
AFI	USAF McClellan AFB, Sacramento, CA, USA
AFS	USAF AWS Offutt AFB, Omaha, NE, USA
AFS	USAF Offutt AFB, Omaha, NE, USA
AGA	USAF Hickam AFB, Honolulu, HWA
AIE	USAF Andersen AFB, GUM
AIF	USAF Yokota, J
AJE	USAF Croughton, G
AJK	USAF Ramstein AFB, D
AJK 33	USAF Aviano, I
AJO	USAF Adana, TUR
AKA	USAF Elmendorf AFB, Anchorage, ALS
AOK	USN Rota, E
AQP	PN Karachi, PAK
ASK	Karachi R, PAK
ATA	Delhi TS, IND
ATP	Delhi Meteo, IND
AWC	Calcutta Air, IND
AXD	RAAF Laverton, VIC, AUS
AXH	RAAF Townsville, QLD, AUS
AXI	RAAF Darwin, NT, AUS
AXI	Darwin Meteo, NT, AUS
AXJ	RAAF Perth, WA, AUS
AXK	RAAF East Sale, VIC, AUS
AXM	Melbourne Meteo, VIC, AUS
AXR	RAAF Richmond, NSW, AUS
AXX	RAAF Brisbane, QLD, AUS
A2SK	Gaborone Air, BOT
A3A	Nuku'alofa R, TON
A3E	Ha'afeva, TON
A3F	Ha'apai, TON
A4M	Muscat R, OMA
A7D	Doha R, QAT

A9M	GNA Manama, BHR
A9M	Hamala R, BHR
BAA	Beijing Meteo, CHN
BAF	Beijing Meteo, CHN
BDF	Shanghai Meteo, CHN
BJZ	Wuhan Meteo, CHN
BLM	Chengdu Meteo, CHN
BM	T'ai-pei Meteo, TAI
BPK	Beijing Meteo, CHN
BPM	Xi'an TS, CHN
BSB	Lanzhou Meteo, CHN
BSF	T'ai-pei TS, TAI
BSQ	CAAC Beijing, CHN
BVA	T'ai-pei R, TAI
BZC	Ürümqi Meteo, CHN
CBA	Antofagasta R, CHL
CBF	Juan Fernandez R, CHL
CBM	Magallanes R, CHL
CBP	Puerto Montt R, CHL
CBS	San Pedro R, CHL
CBT	Talcahuano R, CHL
CBV	Valparaiso R, CHL
CBY	Hanga Roa R, PAQ
CCS	CN Santiago, CHL
CFH	CF Halifax, NS, CAN
CHR	CF Trenton, ONT, CAN
CHU	Ottawa TS, ONT, CAN
CJU	CF Vancouver, BC, CAN
CJX	CF Saint John's, NFLD, CAN
CKN	CF Victoria, BC, CAN
CLA	Habana R, CUB
CLC	Cienfuegos R, CUB
CLC 2	Isabela de Sagua R, CUB
CLF 2	Arroyos de Mantua R, CUB
CLK	Nuevitas R, CUB
CLK 2	Santa Cruz del Sur R, CUB
CLM	Santiago de Cuba R, CUB
CLM 3	Baracoa R, CUB
CLP 1	MFA Habana, CUB
CLP 8	Cuban E Conakry, GUI
CLP 22	Cuban E Hanoi, VTN
CLP 25	Cuban E Maputo, MOZ
CLP 29	Cuban E Delhi, IND
CLP 45	Cuban E Luanda, AGL
CLT	Habana R, CUB
CLT 3	Nueva Gerona R, CUB
CMI	CUBANA Habana, CUB
CND	Agadir R, MRC
CND 3	Safi R, MRC
CNM	MAP Rabat, MRC

CNP	Casablanca R, MRC
CNW	Tanger R, MRC
CSE	PAF Lisbon, POR
CSP 20	Guarda Police, POR
CSY	Santa Maria Air, AZR
CTC	PN Cascais, POR
CTH	PN Horta, AZR
CTN	PN Apulia, POR
CTP	NATO Lisbon, POR
CTQ	PN Porto Santo, MDR
CTS	PN Sagres, POR
CUB	Funchal R, MDR
CUG	Ponta Delgada R, AZR
CUL	Lisbon R, POR
CUW	PAF/USAF Lajes AFB, AZR
CWA	Cerrito R, URG
CWF	Punta Carretas R, URG
CXR	UN Montevideo, URG
C2N	Makwa R, NRU
C5G	Banjul R, GMB
C6N	Nassau R, BAH
C6X	Marsh Harbour R, BAH
C9L 2	Maputo R, MOZ
C9L 6	Mocambique R, MOZ
DAN	Norddeich R, D
DCF 49	BMPT Bonn, D
DCF 77	Mainflingen TS, D
DD	Hamburg Meteo, D
DEB	BKA Wiesbaden, D
DEK 23	DRK Berlin, D
DEK 26	DRK Düsseldorf, D
DEK 30	DRK Hamburg, D
DEK 88	ICRC Bonn, D
DEL	BGS München, D
DEL 60	BGS Rosenheim, D
DER	MOI Bonn, D
DER 50	Bonn, D
DG	PIAB Bonn, D
DHJ 51	Grengel Meteo, D
DHJ 59	GN Wilhelmshaven, D
DHM 44	Grengel Meteo, D
DHM 91	GAF Münster, D
DHN 37	Grengel Meteo, D
DHN 66	GAF Geilenkirchen, D
DHO 23	GAF Landsberg, D
DMK	MFA Bonn, D
DXF	Davao R, PHL
DXR	Davao R, PHL
DXT	Cagayan R, PHL
DYC	Cebu R, PHL
DYK	Dumaguete R, PHL
DYO	Cebu R, PHL
DYP	Cebu R, PHL
DYV	Iloilo R, PHL
DZA	Mandaluyong R, PHL
DZD	Manila R, PHL
DZE	Mandaluyong R, PHL
DZF	Bacoor R, PHL
DZH	Manila R, PHL
DZI	Bacoor R, PHL
DZJ	Bulacan R, PHL
DZK	Bulacan R, PHL
DZM	Bulacan R, PHL
DZN	Navotas R, PHL
DZO	Bulacan R, PHL
DZP	Novaliches R, PHL
DZU	Pasig R, PHL
DZW	Manila R, PHL
DZZ	Manila R, PHL
D3E	Luanda R, AGL
D4A	Mindelo R, Sao Vicente, CPV
D4B	Amilcar Cabral Air, Sal, CPV
D4D	Praia R, Santiago, CPV
D6Z	ASECNA Moroni, COM
EAC	Tarifa R, E
EAD	Madrid R, E
EAE	MFA Madrid, E
EAF	Finisterre R, E
EAL	Las Palmas R, CNR
EAO	Palma R, E
EAS	Cabo Penas R, E
EBA	SN Madrid, E
ECA	Madrid Meteo, E
ED	Madrid R, E
EHY	Madrid R, E
EJK	Valentia R, IRL
EJM	Malin Head R, IRL
ELC	Monrovia R, LBR
ELH	Harbel R, LBR
ELZ	Cape Palmas R, LBR
EQI	Abbas R, IRN
EQJ	Shah Bahar R, IRN
EQL	Anzali R, IRN
EQM	Bushire R, IRN
EQN	Khomeini R, IRN
EQO	Nowshahr R, IRN
ESA	Tallinn R, EST
ESF	Tallinn R, EST
ESP	Pärnu R, EST
ETC	ICRC Addis Ababa, ETH
ETD	Addis Ababa Air, ETH
ETK	EA Addis Ababa, ETH
E3C	Assab R, ERI
EZM	Krasnovodsk R, TKM
FAV 22	FA Mont-Valerien, F
FDC	FAF Metz, F
FDC 7	FAF Strasbourg, F
FDC 8	FAF Colmar, F
FDE	FAF Villacoublay, F
FDE 2	FAF Tours, F
FDE 5	FAF Evreux, F
FDG	FAF Bordeaux, F
FDG 2	FAF Mont-de-Marsan, F
FDI	FAF Aix, F
FDI 8	FAF Nice, F
FDI 22	FAF Narbonne, F

FDY	FAF Orleans, F
FFB	Boulogne-sur-Mer R, F
FFC	Arcachon R, F
FFD	Saint Denis R, REU
FFL	Saint Lys R, F
FFM	Marseille R, F
FFO	Saint Nazaire R, F
FFP	Fort de France R, MRT
FFS	Saint Lys R, F
FFT	Saint Lys R, F
FFU	Brest - Le Conquet R, F
FIS 351	CRS Chalons sur Marne, F
FIS 353	CRS Laval, F
FIS 369	CRS Lyon, F
FIS 392	CRS Nanterre, F
FIT 5	Gap Prefecture, F
FIT 45	Orleans Prefecture, F
FIT 57	Metz Prefecture, F
FJA	Papeete R, Tahiti, OCE
FJN	Dzaoudzi R, MYT
FJP	Noumea R, NCL
FJY 2	DTRE Port-aux-Francais, KER
FJY 3	DTRE Dumont d'Urville, ATA
FJY 4	DTRE Martin de Vivies R, AMS
FJY 5	DTRE Base Alfred-Faure, CRO
FUE	FN Brest, F
FUF	FN Fort de France, MRT
FUJ	FN Noumea, NCL
FUM	FN Papeete, Tahiti, OCE
FUN	FN Lorient, F
FUO	FN Toulon, F
FUV	FN Jibuti, DJI
FUX	FN Le Port, REU
FVA 80	Rosny sur Bois Gendarmerie, F
FXD	Dzaoudzi Meteo, MYT
FXE	Europa Island Meteo, REU
FXJ	Juan de Nova Meteo, REU
FXR	Saint Denis Meteo, REU
FXT	Tromelin Island Meteo, REU
FXZ	Glorieuses Islands Meteo, REU
FZ	Saint Denis Meteo, REU
GCC	Cullercoats R, G
GFA	Bracknell Meteo, G
GFE	Bracknell Meteo, G
GFH	RAF Kai Tak, HKG
GFL	Bracknell Meteo, G
GFW	RAF Akrotiri, CYP
GK	Portishead R, G
GKX	Portishead Air, G
GKZ	Humber R, G
GLD	Land's End R, G
GNI	Niton R, G
GNK	Norwick R, G
GPA	Portishead R, G
GXQ	BA London, G
GXW	RN Portland, G
GYA	RN London, G
GYE	RN London, G
GYU	RN Gibraltar, GIB
HBC 88	ICRC Geneva, SUI
HBD 20	MFA Berne, SUI
HBD 22	Swiss E Delhi, IND
HBD 23	Swiss E Athens, GRC
HBD 37	Swiss E Bucharest, ROU
HBD 40	Swiss E Belgrade, SRB
HBD 41	Swiss E Pretoria, AFS
HBD 44	Swiss E Stockholm, S
HBD 46	Swiss E Habana, CUB
HBD 51	Swiss E El Djaza'ir, ALG
HBD 52	Swiss E Rabat, MRC
HBD 54	Swiss E Rome, I
HBD 55	Swiss E Madrid, E
HBD 57	Swiss E Vienna, AUT
HBD 58	Swiss E Moscow, RUS
HBD 59	Swiss E Ankara, TUR
HBD 60	Swiss E Paris, F
HBD 64	Swiss E Bonn, D
HBD 71	Swiss E Amman, JOR
HBG	Nyon TS, SUI
HBO	Berne Air, SUI
HBT	Berne Air, SUI
HBX	Berne Air, SUI
HCG	Guayaquil R, EQA
HDN	EN Quito, EQA
HD2 IOA	Guayaquil TS, EQA
HEB	Berne R, SUI
HEC	Berne R, SUI
HEE	Berne Air, SUI
HEK	Berne Air, SUI
HEO	Berne Air, SUI
HET	Berne Air, SUI
HGG 31	MTI Budapest, HNG
HGX 21	MFA Budapest, HNG
HGX 22	Hungarian E Athens, GRC
HGX 23	Hungarian E Rome, I
HGX 26	Hungarian E Bucharest, ROU
HGX 38	Hungarian E Vientiane, LAO
HGX 41	Hungarian E Damascus, SYR
HGX 42	Hungarian E Tehran, IRN
HGX 55	Hungarian E El Djaza'ir, ALG
HGX 56	Hungarian E Cairo, EGY
HGX 62	Hungarian E Tripoli, LBY
HIA	Santo Domingo Pilot R, DOM
HKB	Barranquilla R, CLM
HKC	Buenaventura R, CLM
HLA	Taejon TS, KOR
HLC	Inchon R, KOR
HLF	Soul R, KOR
HLG	Soul R, KOR
HLJ	Soul R, KOR
HLK	Gangreung R, KOR
HLL	Soul Meteo, KOR
HLM	Mokp'o R, KOR
HLN	Kunsan R, KOR
HLO	Soul R, KOR
HLP	Pusan R, KOR
HLS	Soul R, KOR
HLU	Taeha-dong R, Ullung do Island, KOR
HLW	Soul R, KOR
HLX	Soul R, KOR
HLY	Yosu R, KOR
HMF	KCNA Pyongyang, KRE
HML	Namp'o R, KRE
HMZ	Pyongyang R, KRE
HPP	Panama R, PNR

HSA	Bangkok R, THA
HSQ	INTERPOL Bangkok, THA
HSW	Bangkok Meteo, THA
HWN	FN Paris, F
HZG	Dammam R, ARS
HZH	Jeddah R, ARS
HZN	Jeddah Meteo, ARS
H4C 1	Honiara, SLM
H4H	Honiara R, SLM
IAR	Rome R, I
IBA	USN Napoli, I
IBC	IAF Rome, I
IBH	USAF Vicenza, I
ICA	IN Ancona, I
ICB	Genova R, I
ICE	IN Brindisi, I
ICH	IN La Maddalena, I
ICN	IN Napoli, I
ICP	IN Trapani, I
ICS	IN La Spezia, I
ICT	IN Taranto, I
ICZ	IN Venezia, I
IDC	Cagliari R, I
IDF	Messina R, I
IDQ	IN Rome, I
IDR	IN Rome, I
IDW	IN Lipari, I
IEA 20	IA Rome, I
IEA 21	IA Torino, I
IER 20	IFG Rome, I
IGJ	IN Augusta, I
ILI	IAF Brindisi, I
IMB	Rome Meteo, I
INY	IAF Bari, I
IPA	Ancona R, I
IPB	Bari R, I
IPC	Crotone R, I
IPD	Civitavecchia R, I
IPL	Livorno R, I
IPP	Palermo R, I
IQA	Augusta R, I
IQH	Napoli R, I
IQN	Lampedusa R, I
IQP	San Benedetto del Tronto R, I
IQQ	Mazara del Vallo R, I
IQX	Trieste R, I
IRM	CIRM Rome, I
IZN	Porto Torres R, I
JBO	Tokyo R, J
JCK	Kobe R, J
JCS	Choshi R, J
JCT	Choshi R, J
JCU	Choshi R, J
JCX	Naha R, J
JDB	Nagasaki R, J
JDC	Choshi R, J
JFA	Funabashi F R, J
JFC	Misaki F R, J
JJC	KYODO Tokyo, J
JJD	RRL Tokyo, J
JJY	Tokyo TS, J
JM	Tokyo Meteo, J
JNA	JN Tokyo, J

JO	Nagasaki R, J
JPA	INTERPOL Tokyo, J
JTF	MFA Ulan Bator, MNG
JWT	NN Stavanger, NOR
JYF	PETRA Amman, JOR
JYJ	RJ Amman, JOR
JYO	Aqaba R, JOR
J2A	Jibuti R, DJI
J5M	Bissau R, GNB
KCC	Corpus Christi R, TX, USA
KEJ	Hoolehua R, HWA
KFS	San Francisco R, CA, USA
KGN	Delcambre R, LA, USA
KLB	Seattle R, WA, USA
KLC	Galveston R, TX, USA
KMI	Dixon R, CA, USA
KNY 29	Egyptian E Washington, DC, USA
KPH	San Francisco R, CA, USA
KUP 65	Majuro R, MHL
KUP 66	Kolonia R, Pohnpei, FSM
KUP 67	Moen R, Truk, FSM
KUP 68	Koror R, PLW
KUP 69	Colonia R, Yap, FSM
KUQ	Pago Pago R, SMA
KUQ 23	Swains Island R, SMA
KVM	Honolulu Meteo, HWA
LBL	Norwegian UNIFIL Naqoura, LBN
LF	Rogaland R, NOR
LFO	Oerlandet R, NOR
LGB	Rogaland R, NOR
LGG	Rogaland R, NOR
LGJ	Rogaland R, NOR
LGL	Floroe R, NOR
LGN	Bergen R, NOR
LGN	Rogaland R, NOR
LGP	Bodoe R, NOR
LGQ	Rogaland R, NOR
LGS	Svalbard R, Spitsbergen, NOR
LGT	Tjoeme R, NOR
LGU	Rogaland R, NOR
LGV	Vardoe R, NOR
LGW	Rogaland R, NOR
LGX	Rogaland R, NOR
LGZ	Farsund R, NOR
LMJ	Jan Mayen R, NOR
LOL	AN Buenos Aires TS, ARG
LOR	AN Puerto Belgrano, ARG
LPD	General Pacheco R, ARG
LPG	Rio Gallegos R, ARG
LPL	General Pacheco R, ARG
LPM	Mar del Plata R, ARG
LPW	Bahia Blanca R, ARG
LPX	Comodoro Rivadavia R, ARG
LQB	Buenos Aires TS, ARG
LQC	Buenos Aires TS, ARG
LRB	Buenos Aires Meteo, ARG
LRO	Buenos Aires Meteo, ARG
LSD	Buenos Aires R, ARG
L2C	ACG Buenos Aires, ARG
L2E	ACG Buenos Aires, ARG

L2F	ACG Buenos Aires, ARG
L2N	ACG Bahia Blanca, ARG
L2T	ACG Mar del Plata, ARG
L2W	ACG Comodoro Rivadavia, ARG
L2Z	ACG Comodoro Rivadavia, ARG
L3A	ACG Comodoro Rivadavia, ARG
L3O	ACG Ushuaia, ARG
L3V	ACG Rio de la Plata, ARG
L4F	ACG Rio Grande, ARG
L4M	ACG San Julian, ARG
L4N	ACG Puerto Deseado, ARG
L5B	ACG Quequen, ARG
LY	Klaipeda R, LTU
LZA	Sofia Meteo, BUL
LZL	Bourgas R, BUL
LZR	Ruse R, BUL
LZS	BN Sofia, BUL
LZU	Sofia Meteo, BUL
LZW	Varna R, BUL
MGJ	RN Faslane, G
MKD	RAF Akrotiri, CYP
MKK	RAF London, G
MKL	RAF Edinburgh, G
MLU	RAF Gibraltar, GIB
MQP	RAF Upavon, G
MSF	Rugby TS, G
MTI	RN Plymouth, G
MUL	RAF Stanley Field, BLZ
MVU	RAF London, G
NAM	USN Norfolk, VA, USA
NAU	USN Roosevelt Roads, Ceiba, PTR
NDT	USN Totsuka, J
NGD	USN McMurdo Sound, ATA
NHG	USN Palmer Station, ATA
NIK	USCG Boston, MA, USA
NKW	USN Diego Garcia, DGA
NMA	USCG Miami, FL, USA
NMC	USCG San Francisco, CA, USA
NMF	USCG Boston, MA, USA
NMG	USCG New Orleans, LA, USA
NMN	USCG Portsmouth, VA, USA
NMO	USCG Honolulu, HWA
NMR	USCG San Juan, PTR
NNN 0ICE	USN MARS McMurdo Sound, ATA
NNN 0MDA	USN MARS Manchester, NH, USA
NNN 0MDC	USN MARS Cheltenham, MD, USA
NNN 0MDF	USN MARS Mayport, FL, USA
NOJ	USCG Kodiak, ALS
NPG	USN San Francisco, CA, USA
NPM	USN Pearl Harbour, HWA
NPN	USN Apra Harbour, GUM
NPX	USN South Pole Station, ATA
NRK	USN Keflavik, ISL
NRV	USCG Apra Harbour, GUM
NUD	USN Adak, ALS
NWC	USN Exmouth, WA, AUS
OBC	Callao R, PRU
OBF	Mollendo R, PRU
OBQ	Iquitos R, PRU
OBY	Paita R, PRU
ODR	Beirut R, LBN

OEC	MFA Vienna, AUT
OEC 21	Austrian E Warsaw, POL
OEC 61	Austrian E Rome, I
OEC 72	Austrian E Lisbon, POR
OFH	Mariehamn R, FIN
OFJ	Helsinki R, FIN
OHG	Helsinki R, FIN
OLP	Prague R, CZE
OLX	Prague, CZE
OLZ	MFA Prague, CZE
OLZ 24	Mongolian E Prague, CZE
OMC	Bratislava R, SVK
OMS	MFA Bratislava, SVK
OMV	Prague, CZE
OMZ 66	MFA Bratislava, SVK
OST	Oostende R, BEL
OSU	Oostende R, BEL
OUA	DM Stevns, DNK
OVC	DM Groennedal, GRL
OVG	DM Frederikshavn, DNK
OVL	DM Torshavn, Faroe Islands, DNK
OWD	DAF Vaerloese, DNK
OWE	DAF Karup, DNK
OXF	Qaqortoq R, GRL
OXI	Nuuk R, GRL
OXJ	Torshavn R, Faroe Islands, DNK
OXM	Ittoqqorttoormiit R, GRL
OXT	Copenhagen Meteo, DNK
OXZ	Lyngby R, DNK
OYR	Aasiat R, GRL
OZL	Ammassalik R, GRL
OZU	MFA Copenhagen, DNK
OZW	Qanaaq R, GRL
PBB	DN Den Helder, NLD
PBC	DN Goeree Island, NLD
PBV	DAF Valkenburg, NLD
PCG	Scheveningen R, NLD
PCH	Scheveningen R, NLD
PCW 1	MFA Den Haag, NLD
PKA	Sabang R, INS
PKB	Belawan R, INS
PKC	Palembang R, INS
PKC 4	Panjang R, INS
PKD	Surabaya R, INS
PKE	Amboina R, INS
PKF	Ujung Pandang R, INS
PKG	Banjarmasin R, INS
PKK	Kupang R, INS
PKM	Bitung R, INS
PKN	Balikpapan R, INS
PKN 6	Samarinda R, INS
PKO	Tarakan R, INS
PKP	Dumai R, INS
PKP 2	Teluk Bayur R, INS
PKQ	Merak R, INS
PKR	Semarang R, INS
PKS	Pontianak R, INS
PKT	Dili R, INS
PKX	Jakarta R, INS
PNK	Jayapura R, INS
PPC	Itajai R, B

PPF	Fortaleza R, B
PPJ	Juncao R, B
PPL	Belem R, B
PPM	Manaus R, B
PPO	Olinda R, B
PPR	Rio de Janeiro R, B
PPT	Santarem R, B
PWB	BN Belem, B
PWN	BN Natal, B
PWX	BN Brasilia, B
PWZ	BN Rio de Janeiro, B
PZN	Paramaribo R, SUR
P2A 2	PNGDF Port Moresby, PNG
P2A 3	PNGDF Lae, PNG
P2M	Port Moresby R, PNG
P2W	Wewak R, PNG
P28 BM	NTM Port Moresby, PNG
P272 PT	PTC Goroka, PNG
RAN 76	R Moscow feeder, RUS
RAN 77	Moscow Meteo, RUS
RAW	Moscow Meteo, RUS
RBI	Moscow Meteo, RUS
RBK	R Moscow feeder, RUS
RBM	R Moscow feeder, RUS
RBV 71	Tashkent Meteo, UZB
RBV 75	Moscow Meteo, RUS
RBV 76	Tashkent Meteo, UZB
RBV 78	Tashkent Meteo, UZB
RBV 79	R Moscow feeder, RUS
RBX	Tashkent Meteo, UZB
RCB 52	R Moscow feeder, RUS
RCB 58	R Moscow feeder, RUS
RCB 59	R Moscow feeder, RUS
RCC	Moscow Meteo, RUS
RCD	R Moscow feeder, RUS
RCG	Moscow Meteo, RUS
RCH	Tashkent TS, UZB
RCH	Tashkent Meteo, UZB
RCI	Moscow Meteo, RUS
RCV	CISN Moscow, RUS
RCW	Almaty Meteo, KAZ
RDD	Moscow Meteo, RUS
RDE	Samara Meteo, RUS
RDL	Smolensk, RUS
RFA	Astrakhan' R, RUS
RFE	Tyumen', SW, RUS
RGH	Arkhangelsk Meteo, RUS
RGJ	Samara Meteo, RUS
RGT	Moscow, RUS
RHT	R Moscow feeder, RUS
RID	Irkutsk TS, SE, RUS
RIJ	Tashkent Meteo, UZB
RIT	CISN Vaygach, RUS
RJK	Kiyev Meteo, UKR
RKA 75	R Moscow feeder, RUS
RKA 76	R Moscow feeder, RUS
RKA 78	Moscow Meteo, RUS
RKC	R Moscow feeder, RUS
RKLM	Arkhangelsk R, RUS
RKR	Irkutsk Meteo, SE, RUS
RKU 71	Moscow Meteo, RUS
RKU 72	R Moscow feeder, RUS
RLX	SOUD Moscow, RUS
RMD	R Moscow feeder, RUS
RMP	CISN Kaliningrad, RUS
RND 77	Moscow Meteo, RUS
RND 79	R Moscow feeder, RUS
RNR	Magadan Meteo, FE, RUS
ROD	Murmansk R, RUS
ROK	Moscow Meteo, RUS
ROM	Tashkent Meteo, UZB
RPJ	Tashkent Meteo, UZB
RPN	Kiyev Meteo, UKR
RPLT	Tuapse R, RUS
RRG 26	R Moscow feeder, RUS
RSGV	Petrozavodsk R, RUS
RST	Mensk Meteo, BLR
RSW	Arkhangelsk Meteo, RUS
RTA	Novosibirsk TS, SW, RUS
RTEU	Aleksandrov-Sakhalinskiy R, FE, RUS
RTO	Moscow Meteo, RUS
RTV	R Moscow feeder, RUS
RTZ	Irkutsk TS, SE, RUS
RUF	Sevastopol' R, UKR
RVL	R Moscow feeder, RUS
RVM	Tashkent Meteo, UZB
RVO	Moscow Meteo, RUS
RVO 73	R Moscow feeder, RUS
RVW 53	Moscow Meteo, RUS
RVZ	Arkhangelsk Meteo, RUS
RWE	R Moscow feeder, RUS
RWG	R Moscow feeder, RUS
RWH	Almaty Meteo, KAZ
RWM	Moscow TS, RUS
RWM 79	R Moscow feeder, RUS
RWZ	Moscow Meteo, RUS
RYM	IAG Moscow, RUS
SAA	Karlskrona R, S
SAB	Goeteborg R, S
SAE	Tingstaede R, S
SAG	Goeteborg R, S
SAM	MFA Stockholm, S
SAM 20	Swedish E Athens, GRC
SAM 26	Swedish E London, G
SAM 31	Swedish E El Djaza'ir, ALG
SAM 37	Swedish E Bucharest, ROU
SAM 40	Swedish E Warsaw, POL
SAM 45	Swedish E Ankara, TUR
SAM 48	Swedish E Damascus, SYR
SAM 50	Swedish E Cairo, EGY
SAM 58	Swedish E Jakarta, INS
SAM 62	Swedish E Beijing, CHN
SAM 70	Swedish E Addis Ababa, ETH
SAM 71	Swedish E Dar es Salaam, TZA
SAM 76	Swedish E Pretoria, AFS
SAM 78	Swedish E Tunis, TUN
SAM 95	Swedish E Sofia, BUL
SDJ	Stockholm R, S
SDR	Stockholm Air, S
SG	Stockholm Air, S
SK	Stockholm Air, S
SNN	MFA Warsaw, POL
SO	PAP Warsaw, POL
SOA	Warsaw Meteo, POL
SPA	Gdynia R, POL
SPB	Szczecin R, POL
SPC	Gdynia R, POL
SPE	Szczecin R, POL
SPH	Gdynia R, POL
SPO	Szczecin R, POL

SPS	Witowo R, POL
SPW	Warsaw R, POL
SRZ	French E Warsaw, POL
STK	Khartoum Air, SDN
STP	Port Sudan R, SDN
SUH	Alexandria R, EGY
SUK	Quseir R, EGY
SUP	Port Said R, EGY
SUU	Cairo Meteo, EGY
SUZ	Serapeum R, EGY
SVA	Athens R, GRC
SVB	Athens R, GRC
SVD	Athens R, GRC
SVF	Athens R, GRC
SVG	Athens R, GRC
SVH	Iraklion R, GRC
SVI	Athens R, GRC
SVJ	Athens R, GRC
SVK	Kerkyra R, GRC
SVL	Limnos R, GRC
SVM	Athens R, GRC
SVN	Athens R, GRC
SVO	Athens R, GRC
SVR	Rhodes R, GRC
SVS	Athens R, GRC
SVT	Athens R, GRC
SVU	Athens R, GRC
SVX	Chios R, GRC
SWA	Athens Meteo, GRC
SXA	GN Piraeus, GRC
SXH	GN Khania, GRC
S3D	Chittagong R, BGD
S3E	Khulna R, BGD
S7Q	Victoria R, Mahe, SEY
S9M	Sao Tome R, STP
TAD	MFA Ankara, TUR
TAF	Samsun R, TUR
TAH	Istanbul R, TUR
TAI	Iskenderun R, TUR
TAL	Antalya R, TUR
TAM	Mersin R, TUR
TAN	Izmir R, TUR
TAO	Trabzon R, TUR
TAR	Zonguldak R, TUR
TAT	Canakkale R, TUR
TBA	TN Ankara, TUR
TBB	TN Ankara, TUR
TBH	TN Izmir, TUR
TBO	TN Izmir, TUR
TCY	AA Ankara, TUR
TFA	Reykjavik R, ISL
TFM	Neskaupstadur R, ISL
TFT	Hornafjoerdur R, ISL
TFV	Vestmannaeyjar R, ISL
TFX	Siglufjoerdur R, ISL
TFZ	Isafjoerdur R, ISL
TJC	Douala R, CME
TKM	Grasse R, F
TNA	Pointe-Noire R, COG
TNL	ASECNA Brazzaville, COG
TRA	Libreville R, GAB
TRK	ASECNA Libreville, GAB
TUA	Abidjan R, CTI
TXU	Saint-Pierre R, SPM
TYA	Cotonou R, BEN
TYE	ASECNA Cotonou, BEN
T3C	Takaronga R, Tarawa Atoll, KIR
T3F 6	MILIPI Bairiki, Tarawa Atoll, KIR
T3F 9	CM Kiritimati, KIR
T3G 2	MOH Bairiki, Tarawa Atoll, KIR
T3L 3	MILIPI Tabuaeran, KIR
T3L 4	MILIPI Teraina, KIR
T3T	PTT Bairiki, Tarawa Atoll, KIR
T3T 5	PWD Bairiki, Tarawa Atoll, KIR
UAD	Kholmsk R, FE, RUS
UAI	Nakhodka R, SE, RUS
UAT	Moscow R, RUS
UAW	Makhachkala R, RUS
UBC	Uglegorsk R, FE, RUS
UBE	Petropavlovsk-Kamchatskiy R, FE, RUS
UBF	Saint Petersburg R, RUS
UBJ	Baku R, AZE
UBR	Vanino R, FE, RUS
UCE	Arkhangelsk R, RUS
UCV	Okhotsk R, FE, RUS
UCW	Saint Petersburg R, RUS
UCY	Astrakhan' R, RUS
UCZ	Provideniya R, FE, RUS
UDJ	Mezen' R, RUS
UDK	Murmansk R, RUS
UDN	Novorossiysk R, RUS
UEO	Nakhodka R, SE, RUS
UFA	Batumi R, GEO
UFC	Nakhodka R, SE, RUS
UFF	Sukhumi R, GEO
UFH	Petropavlovsk-Kamchatskiy R, FE, RUS
UFJ	Rostov-na-Donu R, RUS
UFL	Vladivostok R, SE, RUS
UFM	Nevelsk R, FE, RUS
UFN	Novorossiysk R, RUS
UFO	Kholmsk R, FE, RUS
UFZ	Vladivostok R, SE, RUS
UGC	Saint Petersburg R, RUS
UGE	Arkhangelsk R, RUS
UGH	Provideniya R, FE, RUS
UGN	Nikolayevsk-na-Amure R, FE, RUS
UGW	Novorossiysk R, RUS
UHK	Batumi R, GEO
UHS	Murmansk R, RUS
UHY	Murmansk R, RUS
UIB	Magadan R, FE, RUS
UIF	Anadyr' R, FE, RUS
UIK	Vladivostok R, SE, RUS
UIS	Tuapse R, RUS
UIW	Kaliningrad R, RUS
UJB	Astrakhan' R, RUS
UJE	Moscow R, RUS
UKJ	Astrakhan' R, RUS

UKW	Korsakov R, FE, RUS
ULX	Aleksandrov-Sakhalinskiy R, FE, RUS
UNI	Ventspils R, LVA
UNR	Severo-Kuril'sk R, FE, RUS
UON	Baku R, AZE
UOY	Nar'yan Mar R, RUS
UPW	Liepaja R, LVA
UQB	Kholmsk R, FE, RUS
UQC	Korsakov R, FE, RUS
URK	Kerch R, UKR
URL	Sevastopol' R, UKR
URM	Odessa R, UKR
USI	Kherson R, UKR
USO	Izmail R, UKR
USU	Mariupol R, UKR
UTM	Feodosiya R, UKR
UTQ	Kiyev R, UKR
UTT	Odessa R, UKR
UTW	Mariupol R, UKR
UUI	Odessa R, UKR
UVA	Gelendhzik R, RUS
UVD	Magadan R, FE, RUS
UWD	Yalta R, UKR
UWS	Kiyev R, UKR
UWT	Taganrog R, UKR
UWY	Yalta R, UKR
UXL	Kherson R, UKR
VAC	CCG Courtenay, BC, CAN
VAE	CCG Tofino, BC, CAN
VAI	CCG Vancouver, BC, CAN
VAJ	CCG Prince Rupert, BC, CAN
VAU	CCG Yarmouth, NS, CAN
VBA	CCG Churchill, MAN, CAN
VCA	CCG Charlottetown, PEI, CAN
VCC	CCG Quebec, QUE, CAN
VCF	CCG Mont Joli, QUE, CAN
VCG	CCG Riviere-au-Renard, QUE, CAN
VCK	CCG Sept Iles, QUE, CAN
VCM	CCG Saint Anthony, NFLD, CAN
VCN	CCG Grindstone Island, QUE, CAN
VCO	CCG Sydney, NS, CAN
VCP	CCG Saint Lawrence, NFLD, CAN
VCT	Tors Cove R, NFLD, CAN
VFA	CCG Inuvik, NWT, CAN
VFF	CCG Iqaluit, NWT, CAN
VFN	CCG Montreal, QUE, CAN
VFR	CCG Resolute, NWT, CAN
VHC	RAN Canberra, ACT, AUS
VHI	RAN Darwin, NT, AUS
VIB	Brisbane R, QLD, AUS
VID	Darwin R, NT, AUS
VIM	Melbourne R, VIC, AUS
VIP	Perth R, WA, AUS
VIS	Sydney R, NSW, AUS
VIT	Townsville R, QLD, AUS
VIX	RAN Canberra, ACT, AUS
VJB	RFDS Derby, WA, AUS
VJC	RFDS Broken Hill, NSW, AUS
VJD	RFDS Alice Springs, NT, AUS
VJI	RFDS Mount Isa, QLD, AUS
VJJ	RFDS Charleville, QLD, AUS
VJK	RFDS Meekatharra, WA, AUS
VJN	RFDS Cairns, QLD, AUS
VJQ	RFDS Kalgoorlie, WA, AUS
VJT	RFDS Carnarvon, WA, AUS

VJY	RFDS Darwin, NT, AUS
VKA	Adelaide Police, SA, AUS
VKC	Melbourne Police, VIC, AUS
VKL	RFDS Port Hedland, WA, AUS
VLH	SDE Charleville, QLD, AUS
VLM	Casey Meteo, ATA
VLV	TELSTRA Mawson, ATA
VLZ	TELSTRA Davis, ATA
VNG	Sydney TS, NSW, AUS
VNM	TELSTRA Hobart, TAS, AUS
VNZ	RFDS Port Augusta, SA, AUS
VOJ	CCG Stephenville, NFLD, CAN
VOK	CCG Cartwright, NFLD, CAN
VON	CCG Saint John's, NFLD, CAN
VRX	Victoria Harbour R, HKG
VTF	IN Mumbai, IND
VTG	IN Mumbai, IND
VTK	IN Tuticorin, IND
VTN	IN Cochin, IND
VTO	IN Vishakhapatnam, IND
VTP	IN Vishakhapatnam, IND
VVD	Delhi Meteo, IND
VWB	Mumbai R, IND
VWC	Calcutta R, IND
VWG	Goa R, IND
VWK	Kandla R, IND
VWL	Mangalore R, IND
VWM	Madras R, IND
VWN	Cochin R, IND
VWP	Port Blair R, IND
VWT	Tuticorin R, IND
VWV	Vishakhapatnam R, IND
VWY	Paradwip R, IND
VXA	CF Edmonton, ALTA, CAN
VXV	CFARS Golan Heights, CAN
VZX	Penta R, Gosford, NSW, AUS
VZ8 SK	RFDS/SDE Katherine, NT, AUS
V5L	Lüderitz R, NMB
V5W	Walvis Bay R, NMB
WAH	Saint Thomas R, VIR
WCC	Chatham R, MA, USA
WCM	Withamsville R, OH, USA
WFN	Jeffersonville R, IN, USA
WLC	Rogers City R, MI, USA
WLO	Mobile R, AL, USA
WNU	Slidell R, LA, USA
WOM	Miami R, FL, USA
WOO	Ocean Gate R, NJ, USA
WSC	Tuckerton R, NJ, USA
WWV	Fort Collins TS, CO, USA
WWVB	Fort Collins TS, CO, USA
WWVH	Kihei TS, Maui Island, HWA
XDA	Mexico City R, MEX
XFA	Acapulco R, MEX
XFB	Ciudad del Carmen R, MEX
XFC	Cozumel R, MEX
XFE	Ensenada R, MEX
XFF	Coatzacoalcos R, MEX
XFK	La Paz R, MEX
XFL	Mazatlan R, MEX

XFM	Manzanillo R, MEX
XFN	Progreso R, MEX
XFP	Chetumal R, MEX
XFQ	Salina Cruz R, MEX
XFS	Tampico R, MEX
XFU	Veracruz R, MEX
XFY	Guaymas R, MEX
XPH	USAF Thule AFB, Uummannaq, GRL
XSA	Nanjing R, CHN
XSB	Dandong R, CHN
XSD	Yingkou R, CHN
XSE	Qinhuangdao R, CHN
XSF	Lianyungang R, CHN
XSG	Shanghai R, CHN
XSH	Basuo R, CHN
XSI	Sanya R, CHN
XSJ	Zhanjiang R, CHN
XSK	Beihai R, CHN
XSK 4	Haimen R, CHN
XSL	Fuzhou R, CHN
XSL 22	Fangcheng R, CHN
XSM	Xiamen R, CHN
XSM 4	Quanzhou R, CHN
XSN	Ningbo R, CHN
XSO	Wenzhou R, CHN
XSP	Shantou R, CHN
XSQ	Guangzhou R, CHN
XSR	Haikou R, CHN
XSS	Longkou R, CHN
XST	Qingdao R, CHN
XSU	Yantai R, CHN
XSV	Tianjin R, CHN
XSW	Kao-hsiung R, TAI
XSW 2	T'ai-chung R, TAI
XSX	Chi-lung R, TAI
XSY	Hua-lien R, TAI
XSZ	Dalian R, CHN
XUK	Kompong Som Ville R, CBG
XVG	Hai Phong R, VTN
XVN	VNA Hanoi, VTN
XVN 3	Nha Trang R, VTN
XVQ	Quang Yen R, VTN
XVR	Vung Tau R, VTN
XVS	Ho Chi Minh Ville R, VTN
XVT	Da Nang R, VTN
XVU	Can Tho R, VTN
XYR	Yangon R, MYA
YIR	Basrah R, IRQ
YIL	INA Baghdad, IRQ
YIX	INA Baghdad, IRQ
YJM	Port-Vila R, Efate Island, VUT
YKM	Al Ladhiqiyah R, SYR
YKO	Tartus R, SYR
YKW	SANA Damascus, SYR
YLN	Riga R, LVA
YLQ	Riga R, LVA
YMA	Ankara Meteo, TUR

YMB 20	Bandirma Meteo, TUR
YMY	Samsun Meteo, TUR
YOG 37	Bucharest Meteo, ROU
YOG 59	ROMPRES Bucharest, ROU
YOJ	ROMPRES Bucharest, ROU
YOM	ROMPRES Bucharest, ROU
YPI	Turnu Severin, ROU
YPM	Cluj, ROU
YPM 36	Bucharest, ROU
YPO	Giurgiu, ROM
YQI	Constanta R, ROU
YRR	Bucharest Meteo, ROU
YUW	Bar R, SRB
YVG	La Guaira R, VEN
YVTO	Caracas TS, VEN
YZI	TANJUG Belgrade, SRB
ZAC	Shengjin R, ALB
ZAD	Durres R, ALB
ZAS	Sarande R, ALB
ZAV	Vlore R, ALB
ZBI	Georgetown R, ASC
ZBP	Adamstown R, PTC
ZEN	HKTI Victoria Island, HKG
ZHF 44	BAS Argentine Islands, FLK
ZHF 45	BAS Rothera, ATA
ZHH	Jamestown R, SHN
ZKCT	NZCD Palmerston North, NZL
ZKG	DOC Wellington, NZL
ZKHQ	NZCD Wellington, NZL
ZKJ	Penrhyn R, CKH
ZKLF	Auckland Meteo, NZL
ZKN	Alofa R, NIU
ZKNT	NZCD Auckland, NZL
ZKO	Aitutaki R, CKH
ZKR	Avarua R, Rarotonga Island, CKH
ZKRT	Rarotonga R, CKH
ZKST	NZCD Christchurch, NZL
ZKV	DOC Auckland, NZL
ZKX	RNZAF Auckland, NZL
ZKYX	MRS Tukino, NZL
ZLA	Awanui R, NZL
ZLBC	GPO Campbell Island, NZL
ZLGC	DOC Rotorua, NZL
ZLJE	MRS Leeston, NZL
ZLK	USN Christchurch, NZL
ZLM	RNZN Auckland, NZL
ZLO	RNZN Auckland, NZL
ZLP	RNZN Auckland, NZL
ZLZ	GPO Wellington, NZL
ZME	GPO Raoul Island, Kermadec Islands, NZL
ZMH 25	Napier R, NZL
ZMH 28	Wellington Harbour R, NZL
ZMH 29	Houhora R, NZL
ZMH 33	Motueka R, NZL
ZMH 35	NZCG Tauranga, NZL
ZMH 37	Mangonui R, NZL
ZMH 39	Whangaroa R, NZL
ZMH 44	Tutukaka R, NZL
ZMH 48	NZCG Whitianga, NZL
ZMH 49	NZCG Taranaki, NZL

ZMH 50	Timaru F R, NZL
ZMH 54	Whangamata R, NZL
ZMH 57	Nelson R, NZL
ZMH 62	Westport R, NZL
ZMH 74	Gisborne Harbour R, NZL
ZMH 83	NZCG Whakatane, NZL
ZMH 84	NZCG Wellington, NZL
ZMH 203	Preservation Inlet R, NZL
ZMH 211	Wanganui Harbour R, NZL
ZMH 222	Great Barrier Island R, NZL
ZP	Asuncion R, PRG
ZRH	SAN Cape Town, AFS
ZRO	Pretoria Meteo, AFS
ZRQ	SAN Cape Town, AFS
ZSA	Cape Agulhas R, AFS
ZSC	Cape Town R, AFS
ZSD	Durban R, AFS
ZSE	East London R, AFS
ZSJ	SAN Cape Town, AFS
ZSM	Cape Columbine R, AFS
ZSQ	Port Elizabeth R, AFS
3AC	Monte Carlo R, MCO
3BB	Port Louis Harbour R, MAU
3BM	Port Louis R, MAU
3BT	Vacoas Meteo, MAU
3BZ	Plaisance Air, MAU
3CA 4	Bata R, GNE
3CA 5	Malabo R, GNE
3CA 6	Malabo R, GNE
3CA 7	Malabo R, GNE
3DP	PTT Suva R, FJI
3DQ	PTT Rotuma Island, FJI
3MA	CNA T'ai-pei, TAI
3VB	Bizerte R, TUN
3VK	Tabarka R, TUN
3VL	Kelibia R, TUN
3VM	Mahdia R, TUN
3VS	Sfax R, TUN
3VT	Tunis R, TUN
3VZ	Zarzis R, TUN
3XC	Conakry R, GUI
4PB	Colombo R, SLK
4QQ	DW Trincomalee, SLK
4UK	UNO Khartoum, SDN
4UZ	UNO Geneva, SUI
4XA	Elat R, ISR
4XO	Haifa R, ISR
4XZ	IN Haifa, ISR
5AB	Benghazi R, LBY
5AF	Tripoli Air, LBY
5AT	Tripoli R, LBY
5B	Nicosia R, CYP
5OW	Lagos R, NIG
5RD	Tolanaro R, MDG
5RL	Antsiranana R, MDG
5RN	Nosy Be R, MDG
5RO	Mahajanga R, MDG
5RS	Toamasina R, MDG
5RT	Toliara R, MDG
5ST	ASECNA Antananarivo Meteo, MDG
5SV	Morondava Air, MDG
5TA	Nouadhibou R, MTN
5UA	ASECNA Niamey, NGR
5VA	Lome R, TGO
5WA	Apia R, SMO
5YD	Nairobi Air, KEN
5YE	Nairobi Meteo, KEN
5ZF	Mombasa R, KEN
5ZR 88	ICRC Nairobi, KEN
6MK	YONHAP Soul, KOR
6TR	ICRC Khartoum, SDN
6VA	Dakar R, SEN
6VK	PANA Dakar, SEN
6VU	ASECNA Dakar, SEN
6VU 79	Dakar Meteo, SEN
6WW	FN Dakar, SEN
6YI	Kingston R, JMC
7CB	IN Belawan, INS
7OA	Aden R, YEM
7RP 20	Algerian E Paris, F
7RQ 20	MFA El Djaza'ir, ALG
7RQ 50	Algerian E Jakarta, INS
7RV 20	Algerian E Moscow, RUS
7RY 50	Algerian E Dakar, SEN
7TA	El Djaza'ir R, ALG
7TB	Annaba R, ALG
7TF	Boufarik R, ALG
7TK	Boufarik R, ALG
7TO	Oran R, ALG
7XR 20	El Djaza'ir Meteo, ALG
7XR 31	Bechar Meteo, ALG
7XR 37	Djanet Meteo, ALG
7XR 44	El Golea Meteo, ALG
7XR 54	Ghardaia Meteo, ALG
7XR 62	In Amenas Meteo, ALG
7XR 70	In Salah Meteo, ALG
7XR 85	Tamanrasset Meteo, ALG
7ZA	SAUDIA Jeddah, ARS
8AA	IN Jakarta, INS
8PO	Bridgetown R, BRB
8Q2	Male R, MLD
8RB	Demerara R, GUY

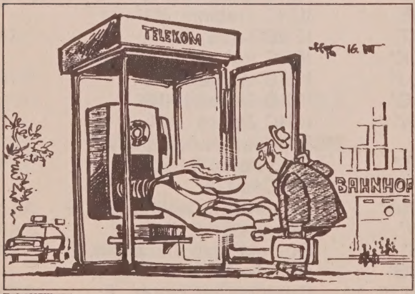
8WB 1	Indian E Belgrade, SRB
8WB 4	Indian E Tehran, IRN
8WD	MFA Delhi, IND
9AR	Rijeka R, HRV
9DM	Tehran Meteo, IRN
9GP	Tema R, GHA
9GX	Tema R, GHA
9HD	Valetta R, MLT
9KK	Safat R, KWT
9LL	Freetown R, SRL

9MB	MN Georgetown, Pinang Island, MLA
9MG	Georgetown R, Pinang Island, MLA
9MP	Kelang R, MLA
9MR	MN Johor Baharu, MLA
9PA	Banana R, ZAI
9VF	KYODO Singapore, SNG
9VG	Singapore R, SNG
9WH	Kota Kinabalu R, Sabah, MLA
9WW 20	Kuching R, Sarawak, MLA
9WW 21	Miri R, Sarawak, MLA
9YL	North Post R, TRD

'A9C'	French E Bucharest, ROU
'BGUI'	French E Bangui, CAF
'C'	Beacon Moscow, RUS
'CAM'	MOSSAD Tel Aviv, ISR
'CJL'	MOSSAD Tel Aviv, ISR
'CNRY'	French E Conakry, GUI
'C37A'	MOSSAD Tel Aviv, ISR
'D'	Beacon Odessa, UKR
'DFZG'	MFA Belgrade, SRB
'DJBT'	French E Jibuti, DJI
'DKAR'	French E Dakar, SEN
'DOR'	MFA Sofia, BUL
'D2Z'	French E Budapest, HNG
'F9S'	French E Prague, CZE
'G8T'	French E Belgrade, SRB
'HCBG'	UNO Gorazde, BIH
'HCBSNBA'	UNO Banja Luka, BIH
'HCBSNBI'	UNO Bihac, BIH
'HCBSNBK'	UNO Bosanski Krupa, BIH
'HCBSNME'	UNO Medna, BIH
'HCBSNMO'	UNO Mostar, BIH
'HCBSNPA'	UNO Pale, BIH
'HCBSNSA'	UNO Sarajevo, BIH
'HCBSNTU'	UNO Tuzla, BIH
'HCBSNZE'	UNO Zenica, BIH
'HCHRVME'	UNO Metkovic, HRV
'HCHRVSJ'	UNO Senj, HRV
'HCHRVSP'	UNO Split, HRV
'HCHRVYZ'	UNO Zagreb, HRV
'HCHRVZA'	UNO Zagreb, HRV
'HCHZ'	UNO Zagreb, HRV
'HCKR'	UNO Pristina, SRB
'HCMOZMA'	UNO Maputo, MOZ
'HCMP'	UNO Podgorica, MKD
'HCNOSVL'	UNO Vrela, SRB
'HCSWIGE'	UNO Geneva, SUI
'HCYB'	UNO Belgrade, SRB
'HCYM'	UNO Metkovic, HRV
'HCYS'	UNO Split, HRV
'HCYT'	UNO Tuzla, BIH
'HCYUGBE'	UNO Belgrade, SRB
'HCYUGJA'	UNO Jablanica, SRB
'HCYV'	UNO Vrela, SRB
'H6L'	French E El Djaza'ir, ALG
'ILMB'	French E Islamabad, PAK
'J5W'	French E Rabat, MRC
'KARIM'	MOI El Djaza'ir, ALG
'KHSA'	French E Kinshasa, ZAI

'KIT'	Bulgarian E Kiyev, UKR
'K4X'	French E Tunis, TUN
'L4N'	French E Dakar, SEN
'MLOP'	Somali E Stockholm, S
'M4W'	MOSSAD Tel Aviv, ISR
'NCSE'	French E Nicosia, CYP
'NDJA'	French E N'djamena, TCD
'NMEY'	French E Niamey, NGR
'O9B'	French E Cairo, EGY
'P'	Beacon Kaliningrad, RUS
'P6Z'	MFA Paris, F
'RBSL'	IN Mumbai, IND
'RBSLV'	IN Vishakhapatnam, IND
'RC2BAL'	ICRC Banja Luka, BIH
'RC2BEL'	ICRC Belgrade, SRB
'RC2BIH'	ICRC Bihac, BIH
'RC2BIJ'	ICRC Bijeljina, BIH
'RC2DAL'	ICRC Dalj, HRV
'RC2GOR'	ICRC Gorazde, BIH
'RC2KNI'	ICRC Knin, HRV
'RC2MBO'	ICRC Zagreb, HRV
'RC2MOT'	ICRC Mostar, BIH
'RC2OKU'	ICRC Okucani, HRV
'RC2OSI'	ICRC Osijek, HRV
'RC2PAL'	ICRC Pale, BIH
'RC2PET'	ICRC Petrinja, HRV
'RC2SAR'	ICRC Sarajevo, BIH
'RC2SPL'	ICRC Split, HRV
'RC2TRE'	ICRC Trebinje, BIH
'RC2TUZ'	ICRC Tuzla, BIH
'RC2VUK'	ICRC Vukovar, HRV
'RC2VOJ'	ICRC Vojnic, HRV
'RC2ZAG'	ICRC Zagreb, HRV
'RC2ZEN'	ICRC Zenica, BIH
'RDFEI'	DM Fredrikshavn, DNK
'RETAQE'	SA Vitoria, E
'RETC'	SA Cadiz, E
'RETCJNA'	SA Jerez de la Frontera, E
'RETELV'	Guardia Civil Viella, E
'RETWB'	Guardia Civil Barcelona, E
'RETWBG'	Guardia Civil Gerona, E
'RETWBL'	Guardia Civil Lerida, E
'RETWBM'	Guardia Civil Manresa, E
'RETWBT'	Guardia Civil Tarragona, E
'RETWBZ'	Guardia Civil Zaragoza, E
'RETWC'	Guardia Civil La Coruna, E
'RETWCG'	Guardia Civil Gijon, E
'RETWCL'	Guardia Civil Lugo, E

'RETWCP'	Guardia Civil Pontevedra,
'RETWL'	Guardia Civil Logrono, E
'RETWLA'	Guardia Civil Vitoria, E
'RETWLG'	Guardia Civil Guipuzcoa, E
'RETWLN'	Guardia Civil Pamplona, E
'RETWVP'	Guardia Civil Palencia, E
'RETXX'	MOI Madrid, E
'RETYMA'	Guardia Civil Avila, E
'RETYMB'	Guardia Civil Badajoz, E
'RETYMC'	Guardia Civil Caceres, E
'RETYMG'	Guardia Civil Guadalajara, E
'RETYMT'	Guardia Civil Toledo, E
'RETYV'	Guardia Civil Valencia, E
'RETYVA'	Guardia Civil Alicante, E
'RETYVC'	Guardia Civil Castellon, E
'RETZS'	Guardia Civil Sevilla, E
'RETZSA'	Guardia Civil Almeria, E
'RETZSC'	Guardia Civil Cadiz, E
'RETZSE'	Guardia Civil Melilla, E
'RETZSG'	Guardia Civil Granada, E
'RETZSH'	Guardia Civil Huelva, E
'RETZSJ'	Guardia Civil Jaen, E
'RETZSL'	Guardia Civil Algeciras, E
'RETZSM'	Guardia Civil Malaga, E
'RETZSO'	Guardia Civil Cordoba, E
'RFFA'	MOD Paris, F
'RFFBBYZ'	FF Zagreb, HRV
'RFFE'	FF Bordeaux, F
'RFFH'	FF Marseille, F
'RFFHCA'	FF Ajaccio, F
'RFFP'	MOD Paris, F
'RFFVA'	FAF Paris, F
'RFFVAE'	FF Dhahran, ARS
'RFFVAT'	FF Incirlik, TUR
'RFFVAY'	FF Sarajevo, BIH
'RFFX'	MOD Paris, F
'RFFXI'	FF Bangui, CAF
'RFFXL'	FF Naqoura, LBN
'RFFXQA'	FF Sarajevo, BIH
'RFGW'	MFA Paris, F
'RFHI'	FF Noumea, NCL
'RFHJ'	FF Papeete, Tahiti, OCE
'RFLI'	FF Fort de France, MRT
'RFLIG'	FF Cayenne, GUF
'RFPTC'	FF N'djamena, TCD
'RFQP'	FF Jibuti, DJI
'RFTJ'	FF Dakar, SEN
'RFTJD'	FF Libreville, GAB
'RFTJDA'	FF Libreville, GAB
'RFTJF'	FF Port Bouet, CTI
'RFTPA'	FF N'djamena, TCD
'RFVI'	FF Le Port, REU
'RFVITT'	FF Dzaoudzi, MYT
'RK2'	MOSSAD/SOUD Moscow, RUS
'RPFN'	PN Lisbon, POR
'RPFNG'	PN Lisbon, POR
'RPFNSB'	PN Sagres, POR
'RPTI'	PN Ponta Delgada, AZR
'RPTMB'	PN Porto Santo, MDR
'RQFNC'	BA Brussels, BEL
'S'	Beacon Arkhangelsk, RUS
'S1'	Seismic-1, LBY
'S2'	Seismic-2, LBY
'TNNR'	French E Antananarivo, MDG
'U3H'	French E Moscow, RUS
'WJI'	SISMI Udine, I
'YNDE'	French E Yaounde, CME
'141'	USA Dhahran, ARS
'2B6'	Czech E Addis Ababa, ETH
'6C2'	Czech E Lagos, NIG
'6XM8'	BNDVB Bonn, D
'7A1'	Czech E Baghdad, IRQ
'78'	UNO Dublin, IRL ☺



Tele-Willkom

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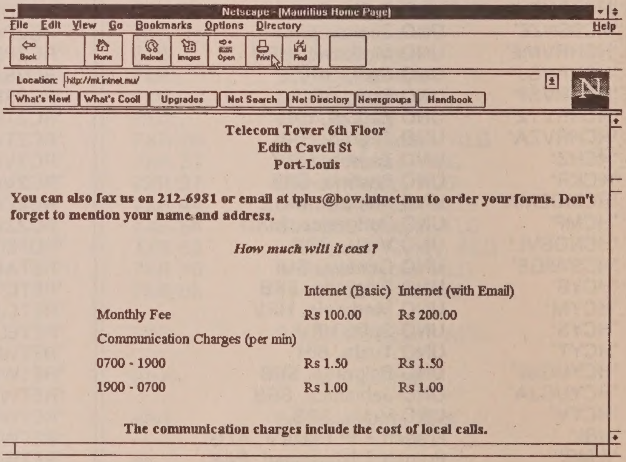

Netscape - [Mauritius Home Page]
File Edit View Go Bookmarks Options Directory Help
Back Home Reload Images Open Print Find
Location: http://mt.intnet.mu/
What's New! What's Cool! Upgrades Net Search Net Directory Newsgroups Handbook

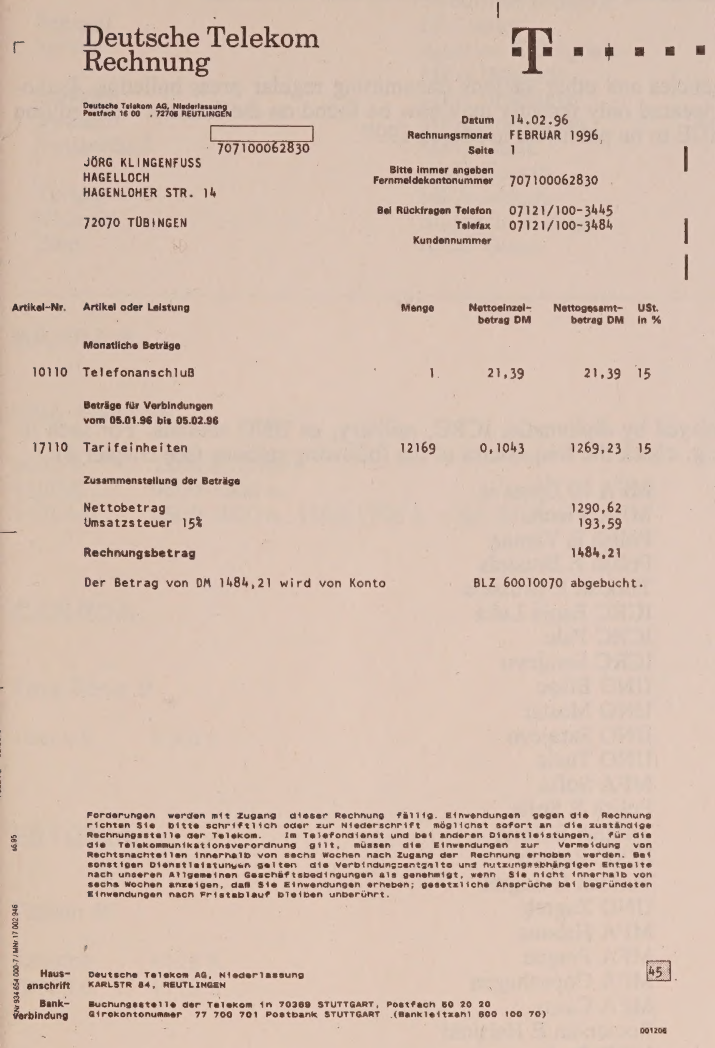
Telecom Tower 6th Floor
Edith Cavell St
Port-Louis

You can also fax us on 212-6981 or email at tplus@bow.intnet.mu to order your forms. Don't forget to mention your name and address.

How much will it cost ?

	Internet (Basic)	Internet (with Email)
Monthly Fee	Rs 100.00	Rs 200.00
Communication Charges (per min)		
0700 - 1900	Rs 1.50	Rs 1.50
1900 - 0700	Rs 1.00	Rs 1.00

The communication charges include the cost of local calls.



Deutsche Telekom
Rechnung

Deutsche Telekom AG, Niederlassung
Postfach 16 00 , 72706 REUTLINGEN

707100062830
JÖRG KLINGENFUSS
HAGELLOCH
HAGENLOHER STR. 14

72070 TÜBINGEN

Datum	14.02.96
Rechnungsmonat	FEBRUAR 1996
Seite	1
Bitte immer angeben Fernmeldekontonummer	707100062830
Bei Rückfragen Telefon	07121/100-3445
Telefax	07121/100-3484
Kundennummer	

Artikel-Nr.	Artikel oder Leistung	Menge	Nettoeinzel-betrag DM	Nettogesamt-betrag DM	USt. in %
	Monatliche Beträge				
10110	Telefonanschluß	1	21,39	21,39	15
	Beträge für Verbindungen vom 05.01.96 bis 05.02.96				
17110	Tarifeinheiten	12169	0,1043	1269,23	15
	Zusammenstellung der Beträge				
	Nettobetrag			1290,62	
	Umsatzsteuer 15%			193,59	
	Rechnungsbetrag			1484,21	

Der Betrag von DM 1484,21 wird von Konto BLZ 60010070 abgebucht.

Forderungen werden mit Zugang dieser Rechnung fällig. Einwendungen gegen die Rechnung richten Sie bitte schriftlich oder zur Niederschrift möglichst sofort an die zuständige Rechnungsstelle der Telekom. Im Telefondienst und bei anderen Dienstleistungen, für die die Telekommunikationsverordnung gilt, müssen die Einwendungen zur Vermeidung von Rechtsnachteilen innerhalb von sechs Wochen nach Zugang der Rechnung erhoben werden. Bei sonstigen Dienstleistungen gelten die Verbindungsentgelte und nutzungsabhängigen Entgelte nach unseren Allgemeinen Geschäftsbedingungen als genehmigt, wenn Sie nicht innerhalb von sechs Wochen anzeigen, daß Sie Einwendungen erheben; gesetzliche Ansprüche bei begründeten Einwendungen nach Fristablauf bleiben unberührt.

45

Hausanschrift Deutsche Telekom AG, Niederlassung
KARLSTR 84, REUTLINGEN

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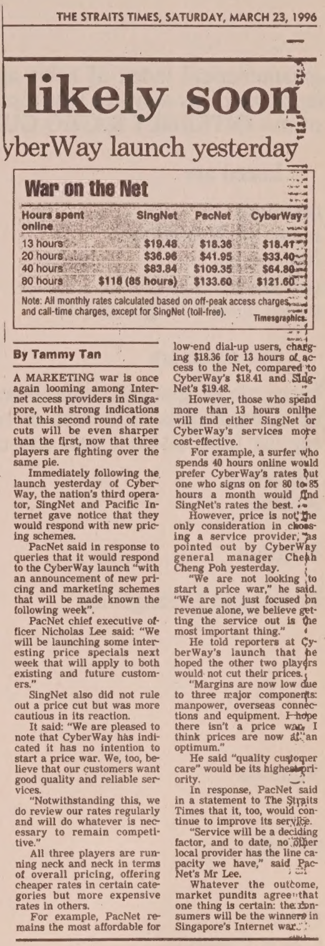
Girokontonummer 77 700 701 Postbank STUTTGART (Bankleitzahl 600 100 70)

001206



THE STRAITS TIMES, SATURDAY, MARCH 23, 1996

likely soon

yberWay launch yesterday

War on the Net

Hours spent online	SingNet	PacNet	CyberWay
13 hours	$19.48	$18.36	$18.41
20 hours	$36.96	$41.95	$33.40
40 hours	$83.84	$109.35	$64.80
80 hours	$118 (85 hours)	$133.60	$121.60

Note: All monthly rates calculated based on off-peak access charges and call-time charges, except for SingNet (toll-free). Timesgraphics

By Tammy Tan

A MARKETING war is once again looming among Internet access providers in Singapore, with strong indications that this second round of rate cuts will be even sharper than the first, now that three players are fighting over the same pie.

Immediately following the launch yesterday of CyberWay, the nation's third operator, SingNet and Pacific Internet gave notice that they would respond with new pricing schemes.

PacNet said in response to queries that it would respond to the CyberWay launch "with an announcement of new pricing and marketing schemes that will be made known the following week".

PacNet chief executive officer Nicholas Lee said: "We will be launching some interesting price specials next week that will apply to both existing and future customers."

SingNet also did not rule out a price cut but was more cautious in its reaction.

It said: "We are pleased to note that CyberWay has indicated it has no intention to start a price war. We, too, believe that our customers want good quality and reliable services.

"Notwithstanding this, we do review our rates regularly and will do whatever is necessary to remain competitive."

All three players are running neck and neck in terms of overall pricing, offering cheaper rates in certain categories but more expensive rates in others.

For example, PacNet remains the most affordable for low-end dial-up users, charging $18.36 for 13 hours of access to the Net, compared to CyberWay's $18.41 and SingNet's $19.48.

However, those who spend more than 13 hours online will find either SingNet or CyberWay's services more cost-effective.

For example, a surfer who spends 40 hours online would prefer CyberWay's rates but one who signs on for 80 to 85 hours a month would find SingNet's rates the best.

However, price is not the only consideration in choosing a service provider, as pointed out by CyberWay general manager Cheah Cheng Poh yesterday.

"We are not looking to start a price war," he said. "We are not just focused on revenue alone, we believe getting the service out is the most important thing."

He told reporters at CyberWay's launch that he hoped the other two players would not cut their prices.

"Margins are now low due to three major components: manpower, overseas connections and equipment. I hope there isn't a price war. I think prices are now at an optimum."

He said "quality customer care" would be its highest priority.

In response, PacNet said in a statement to The Straits Times that it, too, would continue to improve its service.

"Service will be a deciding factor, and to date, no other local provider has the line capacity we have," said PacNet's Mr Lee.

Whatever the outcome, market pundits agree that one thing is certain: the consumers will be the winners in Singapore's Internet war.

Such are Teutonic Telekom's outrageous new 1996 telephone tariff rates, deliberately decided and fully authorized by the most incompetent so-called government that we have ever seen here - so far. When asked by journalists recently about his opinion of the information highway, Mr. The Big Fat Incompetence gabbled about the German Autobahn ... Intolerable! Now compare that guy with the Prime Minister of a *really developed* country like Malaysia who decided to built a Multimedia Super Corridor stretching over 750 km² from Kuala Lumpur over the new administrative capital Putrajaya to the new international airport Sepang, with two billion Dollars planned for telecommunications and offices for software designers, electronic publishers and other hi-tech firms, due for completion already in 1999! Compare our JAN 1996 telephone access bill to the *combined* access/provider rates charged in *really developed* countries such as Singapore where the telephone rates to the United States of America = 15,000 km have recently been slashed to 1.20 SGD a minute; here in Germoney the Sauteure Telekom charges us a full 3.12 DEM a minute to Malaysia or Mauritius = 10,000 km!

8 RTTY press services in alphabetical order

Alphanumerical index of news agencies and other stations transmitting regular press bulletins. Radioteleprinter press services that disappeared only recently may now be found on the Internet - see edition 2 of our INTERNET RADIO GUIDE to be published in March 1997.

Listed are

- country;
- name of the station;
- frequency;
- call sign;
- time (-s) and language (-s).

Not listed are

- harmonic or spurious emissions;
- news broadcasts originated or relayed by diplomatic, ICRC, military, or UNO stations. For such irregular transmissions you may e.g. check the frequencies of the following stations (see chapter 4):

Algeria	MFA El Djaza'ir
Austria	MFA Vienna
	Polish E Vienna
Belgium	Polish E Brussels
	Turkish E Brussels
Bosnia and Herzegovina	ICRC Banja Luka
	ICRC Pale
	ICRC Sarajevo
	UNO Bihac
	UNO Mostar
	UNO Sarajevo
	UNO Tuzla
Bulgaria	MFA Sofia
	Polish E Sofia
	Turkish E Sofia
Croatia	ICRC Zagreb
	Turkish E Zagreb
	UNO Zagreb
Cuba	MFA Habana
Czech Republic	MFA Prague
Denmark	MFA Copenhagen
Egypt	MFA Cairo
Finland	Romanian E Helsinki
France	MOD Paris
Germany	Polish E Cologne
Hungary	MFA Budapest
Indonesia	MFA Jakarta
Iraq	Cuban E Baghdad
Kenya	Polish E Nairobi
Martinique	FF Fort de France
Morocco	Japanese E Rabat
Netherlands	MFA Den Haag
Norway	MFA Oslo
	NN Stavanger
Pakistan	MFA Islamabad
Poland	MFA Warsaw
Romania	MFA Bucharest

Russian Federation	Bulgarian E Moscow
	Swedish E Moscow
Senegal	FF Dakar
Serbia	Austrian E Belgrade
	MFA Belgrade
Slovakia	MFA Bratislava
Sweden	MFA Stockholm
Switzerland	MFA Berne
	UNO Geneva
Turkey	MFA Ankara
Ukraine	Bulgarian E Kiyev
Zaire	ICRC Goma

BAHRAIN

GNA Manama

4042.0	1500 E, 1700 A
9196.6	0500-1500 A
14764.0	0500-1500 A, 1500-1700 E, 1700-2100 A

CANADA

Tors Cove R

16844.0	2000 E

ESTONIA

Tallinn R

12593.0	1115 R
16826.0	1115 R

GERMANY

PIAB Bonn

7916.0	0645-0845 + 1345-1445 + 1600-1800 G
9361.9	1600-1800 G
13438.6	0830-1030 G
13570.9	0830-1030 G
14458.5	1500-1700 G
16013.8	0730-1030 G
16017.4	1500-1700 G
18704.2	0830-1030 G

HUNGARY

MTI Budapest

9114.0	1000+1100+1700 E
17468.0	0600 E

IRAQ

INA Baghdad

5867.0	1600+2000+2100 A
7565.0	0700+1400+1600+1800 A
10162.5	1000-1400 E, 1500 A
14699.0	0500-1800 A

JORDAN

PETRA Amman

5055.0	1400+1500 A, 1700-1900 E
6830.0	1500+1600 A, 1700-1900 E
14560.0	0800 E, 0900+1000+1100 A

KOREA (REPUBLIC OF)

YONHAP Soul

11602.5	0030+0700+0800+1200 E

KOREA (UNDEMOCRATIC PEOPLE'S REPUBLIC OF)

KCNA Pyongyang

8020.0	1230-1430+1500-1700+1800-2100 E
8152.0	1145-1430 F
9395.0	1500-1700 E, 1800-2100+2130-2400 F
10524.0	1145-1430 F
10580.0	0400-0600+1000-1100+1230-1430+1500-1700 E
11430.0	0400-0600+1000-1200 E, 1230-1430 R, 1500-1700 E, 2130-2400 F
11476.0	0400-0730+1230-1430+1800-2100+2130-2300 E
11536.0	0400-0600+0800-1000 E, 1145-1430+1800-2100 F
12175.0	0400-0600+1830-2100+2130-2300 E
13580.0	0400-0600+0800-1030 E, 1145-1430 F, 2130-2300 E
13780.0	0400-0600 E, 0600-0830 R, 1000-1200 E, 1230-1430 R, 1500-1700 E
14452.0	0800-1000 E, 1145-1430 F

14568.0	0400-0600 + 1000-1100 E
15633.0	0400-0600 E, 0600-0830 R, 1000-1200 E, 1230-1430 R

LAOS

KPL Vientiane

14639.0	0800 + 0900 E

LIBYA

JANA Tripoli

12186.0	1400 + 1500 + 1600 F, 1700 + 1800 + 1900 E
14573.0	0700-1900 A
15462.0	0800-0900 E, 1100-1200 + 1730-1830 F
20560.0	1600 + 1700 E

MOROCCO

MAP Rabat

10213.1	1000-1130 F, 1200-1400 E, 1530-1700 F
13585.9	1000-1130 F, 1200-1400 E, 1530-1700 F
18220.9	1000-1130 F, 1200-1400 E, 1530-1700 F
18265.0	1000-1130 F, 1200-1400 E, 1530-1700 F
18496.1	0900-1030 A, 1200-1400 E, 1530-1700 A

PHILIPPINES

PNA Manila

6301.5	0730 E
16777.0	1100 E
16788.0	0630 + 0750-0810 + 0930 + 1450-1510 + 1650-1710 E
16798.0	1100 + 1300 E

POLAND

PAP Warsaw

11423.5	1400 + 1800 Polish
14912.5	1400 + 1800 Polish
18648.5	1200 + 1400 + 1800 Polish

Warsaw R

7975.0	1400 + 1500 + 1800 Polish

ROMANIA

ROMPRES Bucharest

6972.0	1500 + 1600 F, 1700 + 1800 + 1900 E
9797.0	0900 E, 1000 F
12110.0	1100 + 1200 E

SENEGAL

PANA Dakar

16117.0	0800-2000 E/F

SERBIA

TANJUG Belgrade

5240.0	2100 E
7658.0	1000 + 1100 + 1300 + 1700 + 2100 + 2200 E
7806.0	1200 + 1700 + 1800 E
12212.5	1100 + 1200 + 1300 + 1600 E
13440.0	0000 + 0900 + 1100 + 1300 E

SUDAN

SUNA Khartoum

15731.0	0900 E, 1000 + 1415-1800 A
19463.0	0915 + 1615 F, 1700 E

SWEDEN

Goeteborg R

2423.5	1700 Swedish
4268.6	1700 Swedish
8556.0	1700 Swedish
12818.0	0500 + 1700 Swedish
17024.0	1700 Swedish

SYRIA

SANA Damascus

3560.0	1600 A, 1700 F, 1800 E
11080.0	0700-2000 A/E/F

TURKEY

AA Ankara

8137.4	1400 Turkish, 1430 + 1500 E/F, 1630-1900 Turkish
18040.0	0700-1100 E, 1100-1300 Turkish, 1300-1330 E, 1330-1600 Turkish

VIET NAM

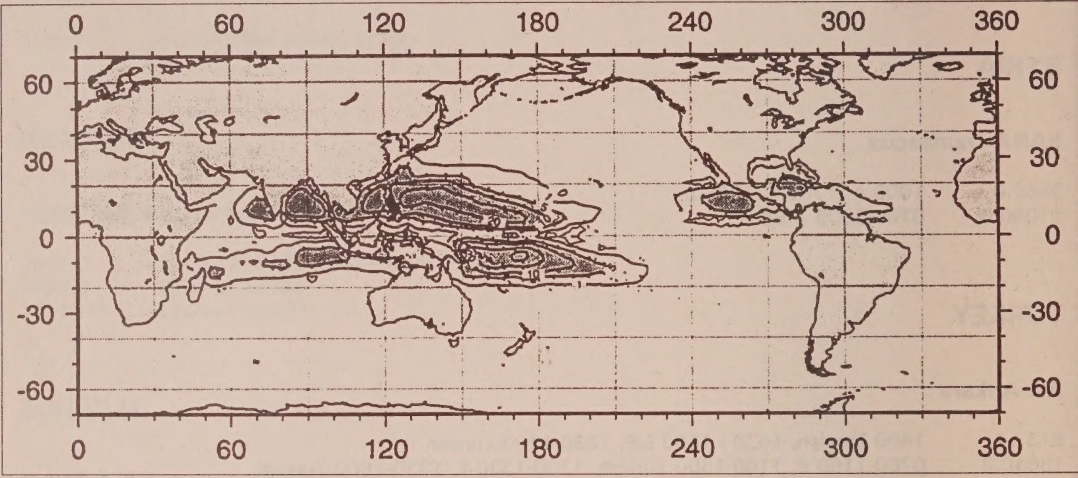
VNA Hanoi

10600.0	1200-1330 F, 1330-1530 E, 1530 + 1600 F
15744.5	0630 E
18264.0	0515-0645 F, 0645-0830 E ☺

Tropical Cyclone *Hansella* over Rodrigues during our 1996 Indian Ocean monitoring mission

Meteo France - Climatology

Climatological cyclogenetic index - isolines indicating the number of tropical storms and cyclones for each 5° × 5° square during the past 20 years. Cyclones occur only in the subtropics and not on the Equator, and obviously not between South America and Africa - the water there is probably too cold to reach the critical 21° temperature. This chart shows clearly that Rodrigues receives more cyclones than Mauritius or Réunion.



Rodrigues was one of the destinations of our MAR/APR 1996 monitoring mission to Southeast Asia and the Indian Ocean. As it happened, we left the island only a few days before a very bad cyclone, and we have been able to monitor the action from Mauritius:

05 APR 1996: Severe depression forming at 18.5° S 63.5° E. Gusts 120 km/h increasing to 160 km/h and torrential rains expected during the night. Li viendra? Non viendra? Mauritius Broadcasting Corporation continues to broadcast cyclone warnings and endless lists of emergency shelters: Centre Communautaire de Rivière Banane ... Ecole Maternelle de Port Mathurin ...

05 APR 1996 1200 UTC: Li viendra!!! Meteorological Station Pointe Canon, Port Mathurin, ROD, SYNOP transmission to Vacoas Meteo, MAU (see chapter 3.10 in our RADIO DATA CODE MANUAL): 41310 81219/46 10257 20250 49906 76366 3772X 333 59118 84705 86812 88458 91151 94312 high max 26.9 rainfall 06-12 14.2 mm; Meteorological Station Pointe Corail Airport: 41310 81338/57 10257 20256 49899 76066 8777X 59121 83706 32612 87458 91159 high max 26.6 rainfall 06-12 5.5 mm. Vacoas to Pointe Canon: "Bon courage!"

06 APR 1996 0300 UTC: Pointe Canon does not answer Vacoas' call on SYNOP time. Agalega Islands' (located northwest of Rodrigues) SYNOP: 41460 72224 10267 20250 40030 71522 85806 58000 83817 84650 86278 94322

06 APR 1996 0315 UTC - MBC transmits cyclone warning # 13: *A cyclone warning class 4 is in force in Rodrigues. Tropical cyclone Hansella. The eye is now passing Rodrigues gusts 163 km/h rainfall 180 mm in 24 hours.* The eye of the cyclone has been stationary over the island for five hours!

07 APR 1996 0600 UTC: Cyclone Hansella position 220 km SE Rodrigues quasi-stationary

08 APR 1996 1253 UTC: Finally the relieving message on MBC: *Aucun avertissement de cyclone est en vigueur a Rodrigues!*

Cyclone wind gusts can easily reach 280 km/h. In order to present the smallest surface to the strong winds, Mauritius Telecom's large parabolic antenna at Pointe Venus, east of Port Mathurin, has been positioned off from INTELSAT (positioned over the Equator) to flat dish (zenith). [See the cover page of our 1991 GUIDE TO UTILITY RADIO STATIONS for a picture of that site. The beautiful créole-style villa, originally built as the Cable & Wireless quarters and later converted into charming old *Hotel Pointe Vénus* for a handful of tourists, now falls into decay. In 1990 it was still open and at sunset it was nice to sit on its wonderful veranda and sip that *punch créole* or *rhum d'arrangé*. Let's hope that Air Mauritius, who owns the place and decided to neglect it and promote its new luxury and empty *Cotton Bay Hotel* instead, will sometimes realize that *tourisme à la Maurice* will not work in Rodrigues.]

By this, all normal communication links with the outside world were completely cut off. (Up to the fourties, Rodrigues has been a major submarine cable booster station between Europe and Australia, but today nothing is left of these installations.) Rural telephone links across the island were still operational, however, until the total breakdown of the island's power supply generators. Later, a few emergency power supply diesels at selected sites (installed only three weeks ago - we met the system engineers on place) were still in operation.

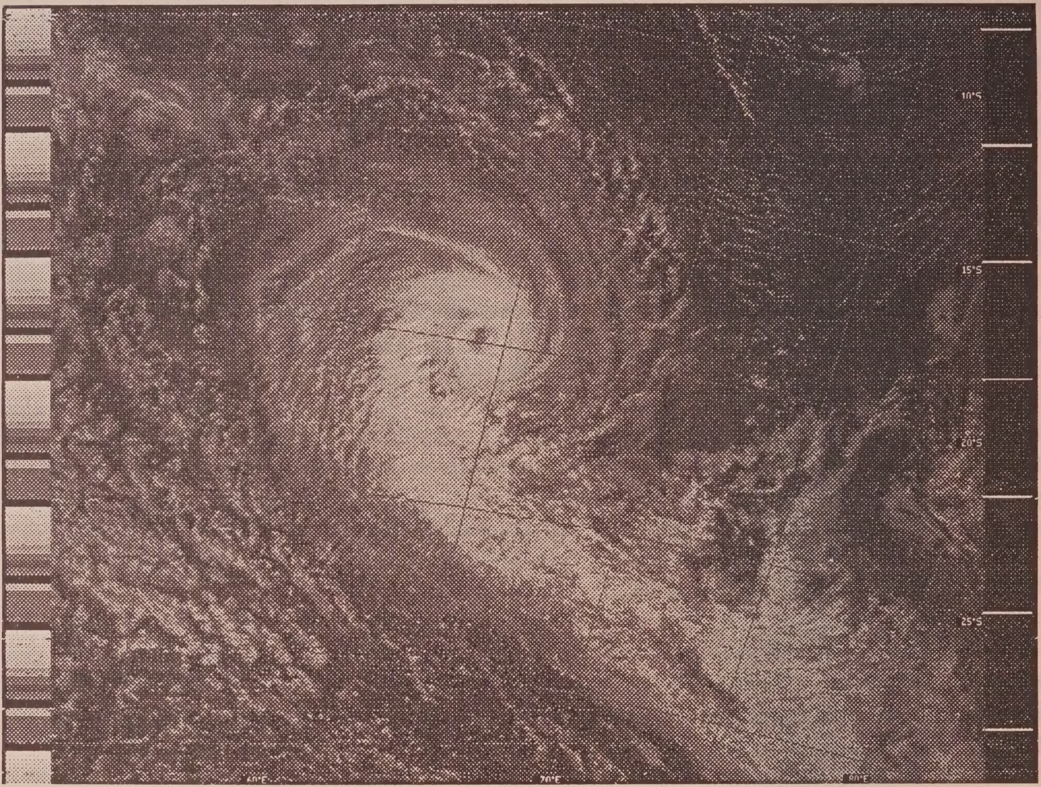
With the early failure of the emergency power supply at Pointe Corail airport, the Civil Aviation link to Plaisance Air on night 5731 kHz day 8028 kHz was down, and Pointe Corail Meteo has not been able to report any observation to Pointe Canon Meteo on 3650 kHz or 5820 kHz for relay to Vacoas Meteo. This made it quite difficult to resume air traffic after the passing of Hansella, and regular air service between Mauritius and Rodrigues was resumed not before 09 APR 1996, with the Mauritius - Réunion ATR48 shuttle being used for several additional Mauritius - Rodrigues flights while the Mauritius - Réunion route was served by Air Austral's B737.

Since we did not monitor any traffic between the Special Mobile Force detachment on Rodrigues and their headquarters at Vacoas - located just across the road from Vacoas Meteo, by the way - Pointe Canon Meteo's shortwave radio link to Vacoas remained Rodrigues' only connection to the outside world for several days. Simple but effective procedures established during decades of experience with tropical storms: at cyclone warning class 2, one of two shortwave dipole antennas is put down. If the other antenna is damaged during the cyclone, it is a matter of a few seconds to pull up the backup. During the passing of the cyclone, Pointe Canon exchanged hourly or even half-hourly reports with Vacoas, with personal comments in Créole *(this is inofficial ... the anemometer has broken down, and all wind measurements from now on are estimated ... The road outside the station is blocked by rocks ... We have no telephone contact to Port Mathurin* [located just 100 m below] *and we don't know anything about the devastations there ...)*. Monitoring all this was not too easy due to frequent use of Créole, English and French within the same sentence under stress conditions, however after countless monitoring missions in this region we are pretty well accustomed to it.

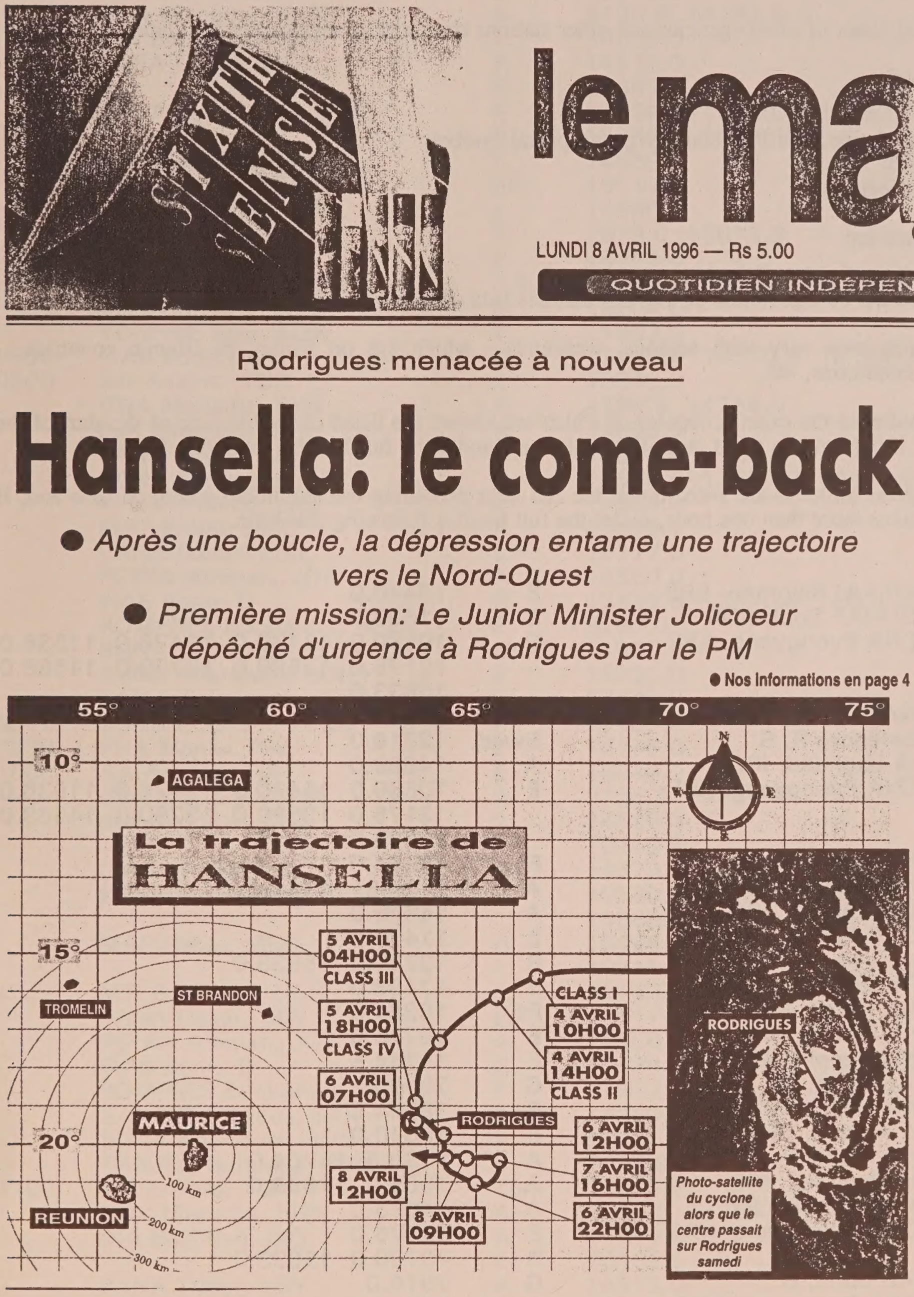
Hansella caused torrential floods and heavy seas and did a lot of damage to buildings, roads, bridges, and infrastructure such as power lines. 80 % of the harvest was destroyed. Urgent non-meteo messages, such as those relating to the Central Electricity Board, were also exchanged on this one radio link. So we must have been among the best-informed people in Mauritius during Rodrigues' nightmare, and our feelings were with our nice and hospitable friends that we had met under more fortunate circumstances only a few days before.

NOAA-14 - Satellite

Satellite picture of 07 APR 1996 0930 UTC, showing cyclone Hansella located over Rodrigues with a central pressure of 965 hPa and gusts of 178 km/h


10°S
15°S
20°S
25°S
60°E
70°E
80°E

Newspaper cut with *Hansella* trajectory


SIXTH SENSE
le ma

LUNDI 8 AVRIL 1996 — Rs 5.00

QUOTIDIEN INDÉPEN

Rodrigues menacée à nouveau

Hansella: le come-back

- *Après une boucle, la dépression entame une trajectoire vers le Nord-Ouest*
- *Première mission: Le Junior Minister Jolicoeur dépêché d'urgence à Rodrigues par le PM*

● **Nos informations en page 4**

55°
60°
65°
70°
75°
10°
15°
20°
AGALEGA
La trajectoire de HANSELLA
N
W
E
S
TROMELIN
ST BRANDON
MAURICE
REUNION
100 km
200 km
300 km
5 AVRIL 04H00
CLASS III
5 AVRIL 18H00
CLASS IV
6 AVRIL 07H00
CLASS I
4 AVRIL 10H00
4 AVRIL 14H00
CLASS II
RODRIGUES
6 AVRIL 12H00
7 AVRIL 16H00
6 AVRIL 22H00
8 AVRIL 12H00
8 AVRIL 09H00
RODRIGUES

Photo-satellite du cyclone alors que le centre passait sur Rodrigues samedi

9 RTTY press services in chronological order

Chronological index of news agencies and other stations transmitting regular press bulletins.

Listed are

- time;
- name of the station, and ITU country/geographical symbol;
- language (-s);
- frequency (-ies).

Not listed are

- harmonic or spurious emissions;
- news broadcasts by diplomatic or military stations (see chapter 8).

Schedules may vary with seasons, weekends - which are on Friday in Islamic countries -, propagation conditions, etc.

Press bulletins the exact schedules of which are known are listed under the time of the start of the bulletin and, if the bulletin takes more than one hour, under the full hour(s) following that time.

Other press bulletins are listed under the full hour preceding the monitored reception time and, if the bulletin takes more than one hour, under the full hour(s) following that time.

0000	TANJUG Belgrade, SRB	E	13440.0
0030	YONHAP Soul, KOR	E	11602.5
0400	KCNA Pyongyang, KRE	E	10580.0 11430.0 11476.0 11536.0 12175.0 13580.0 13780.0 14568.0 15633.0
0500	GNA Manama, BHR	A	9196.8 14764.0
	Goeteborg R, S	Swed.	12818.0
	INA Baghdad, IRQ	A	14699.0
	KCNA Pyongyang, KRE	E	10580.0 11430.0 11476.0 11536.0 12175.0 13580.0 13780.0 14568.0 15633.0
0515	VNA Hanoi, VTN	F	18264.0
0600	GNA Manama, BHR	A	9196.8 14764.0
	INA Baghdad, IRQ	A	14699.0
	KCNA Pyongyang, KRE	E	11476.0
		R	13780.0 15633.0
	MTI Budapest, HNG	E	17468.0
	VNA Hanoi, VTN	F	18264.0
0630	PNA Manila, PHL	E	16788.0
	VNA Hanoi, VTN	E	15744.5
0645	PIAB Bonn, D	G	7916.0
	VNA Hanoi, VTN	E	18264.0
0700	AA Ankara, TUR	E	18040.0
	GNA Manama, BHR	A	9196.8 14764.0
	INA Baghdad, IRQ	A	7565.0 14699.0
	JANA Tripoli, LBY	A	14573.0
	KCNA Pyongyang, KRE	E	11476.0
		R	13780.0 15633.0
	PIAB Bonn, D	G	7916.0
	SANA Damascus, SYR	A/E/F	11080.0
	VNA Hanoi, VTN	E	18264.0
	YONHAP Soul, KOR	E	11602.5

0730	PIAB Bonn, D	G	16013.8			
	PNA Manila, PHL	E	6301.5			
0750	PNA Manila, PHL	E	16788.0			
0800	AA Ankara, TUR	E	18040.0			
	GNA Manama, BHR	A	9196.8	14764.0		
	INA Baghdad, IRQ	A	14699.0			
	JANA Tripoli, LBY	A	14573.0			
		E	15462.0			
	KCNA Pyongyang, KRE	E	11536.0	13580.0	14452.0	
		R	13780.0	15633.0		
	KPL Vientiane, LAO	E	14639.0			
	PANA Dakar, SEN	E/F	16117.0			
	PETRA Amman, JOR	E	14560.0			
	PIAB Bonn, D	G	7916.0	16013.8		
	PNA Manila, PHL	E	16788.0			
	SANA Damascus, SYR	A/E/F	11080.0			
	VNA Hanoi, VTN	E	18264.0			
	YONHAP Soul, KOR	E	11602.5			
0830	PIAB Bonn, D	G	13438.6	13570.9	18704.2	
0900	AA Ankara, TUR	E	18040.0			
	GNA Manama, BHR	A	9196.8	14764.0		
	INA Baghdad, IRQ	A	14699.0			
	JANA Tripoli, LBY	A	14573.0			
	KCNA Pyongyang, KRE	E	11536.0	13580.0	14452.0	
	KPL Vientiane, LAO	E	14639.0			
	MAP Rabat, MRC	A	18496.1			
	PANA Dakar, SEN	E/F	16117.0			
	PETRA Amman, JOR	A	14560.0			
	PIAB Bonn, D	G	13438.6	13570.9	16013.8	18704.2
	ROMPRES Bucharest, ROU	E	9797.0			
	SANA Damascus, SYR	A/E/F	11080.0			
	SUNA Khartoum, SDN	E	15731.0			
	TANJUG Belgrade, SRB	E	13440.0			
0915	SUNA Khartoum, SDN	F	19463.0			
0930	PNA Manila, PHL	E	16788.0			
1000	AA Ankara, TUR	E	18040.0			
	GNA Manama, BHR	A	9196.8	14764.0		
	INA Baghdad, IRQ	A	14699.0			
		E	10162.5			
	JANA Tripoli, LBY	A	14573.0			
	KCNA Pyongyang, KRE	E	10580.0	11430.0	13580.0	13780.0
			14568.0	15633.0		
	MAP Rabat, MRC	A	18496.1			
		F	10213.1	13585.9	18220.9	18265.0
	MTI Budapest, HNG	E	9114.0			
	PANA Dakar, SEN	E/F	16117.0			
	PETRA Amman, JOR	A	14560.0			
	PIAB Bonn, D	G	13438.6	13570.9	16013.8	
	ROMPRES Bucharest, ROU	F	9797.0			
	SANA Damascus, SYR	A/E/F	11080.0			
	SUNA Khartoum, SDN	A	15731.0			
	TANJUG Belgrade, SRB	E	7658.0			
1100	AA Ankara, TUR	Turk.	18040.0			
	GNA Manama, BHR	A	9196.8	14764.0		
	INA Baghdad, IRQ	A	14699.0			
		E	10162.5			
	JANA Tripoli, LBY	A	14573.0			
		F	15462.0			
	KCNA Pyongyang, KRE	E	11430.0	13780.0	15633.0	
	MAP Rabat, MRC	F	10213.1	13585.9	18220.9	18265.0

1100	MTI Budapest, HNG	E	9114.0
	PANA Dakar, SEN	E/F	16117.0
	PETRA Amman, JOR	A	14560.0
	PNA Manila, PHL	E	16777.0 16798.0
	ROMPRES Bucharest, ROU	E	12110.0
	SANA Damascus, SYR	A/E/F	11080.0
	TANJUG Belgrade, SRB	E	7658.0 12212.5 13440.0
1115	Tallinn R, EST	R	12593.0 16826.0
1145	KCNA Pyongyang, KRE	F	8152.0 10524.0 11536.0 13580.0 14452.0
1200	AA Ankara, TUR	Turk.	18040.0
	GNA Manama, BHR	A	9196.8 14764.0
	INA Baghdad, IRQ	A	14699.0
		E	10162.5
	JANA Tripoli, LBY	A	14573.0
	KCNA Pyongyang, KRE	F	8152.0 10524.0 11536.0 13580.0 14452.0
	MAP Rabat, MRC	E	10213.1 13585.9 18220.9 18265.0 18496.1
	PANA Dakar, SEN	E/F	16117.0
	PAP Warsaw, POL	Polish	18648.5
	ROMPRES Bucharest, ROU	E	12110.0
	SANA Damascus, SYR	A/E/F	11080.0
	TANJUG Belgrade, SRB	E	7806.0 12212.5
	VNA Hanoi, VTN	F	10600.0
	YONHAP Soul, KOR	E	11602.5
1230	KCNA Pyongyang, KRE	E	8020.0 10580.0 11476.0
		R	11430.0 13780.0 15633.0
1300	AA Ankara, TUR	E	18040.0
	GNA Manama, BHR	A	9196.8 14764.0
	INA Baghdad, IRQ	A	14699.0
		E	10162.5
	JANA Tripoli, LBY	A	14573.0
	KCNA Pyongyang, KRE	E	8020.0 10580.0 11476.0
		F	8152.0 10524.0 11536.0 13580.0 14452.0
		R	11430.0 13780.0 15633.0
	MAP Rabat, MRC	E	10213.1 13585.9 18220.9 18265.0 18496.1
	PANA Dakar, SEN	E/F	16117.0
	PNA Manila, PHL	E	16798.0
	SANA Damascus, SYR	A/E/F	11080.0
	TANJUG Belgrade, SRB	E	7658.0 12212.5 13440.0
	VNA Hanoi, VTN	F	10600.0
1330	AA Ankara, TUR	Turk.	18040.0
	VNA Hanoi, VTN	E	10600.0
1345	PIAB Bonn, D	G	7916.0
1400	AA Ankara, TUR	Turk.	8137.4 18040.0
	GNA Manama, BHR	A	9196.8 14764.0
	INA Baghdad, IRQ	A	7565.0 14699.0
		E	10162.5
	JANA Tripoli, LBY	A	14573.0
		F	12186.0
	KCNA Pyongyang, KRE	E	8020.0 10580.0 11476.0
		F	8152.0 10524.0 11536.0 13580.0 14452.0
		R	11430.0 13780.0 15633.0
	PANA Dakar, SEN	E/F	16117.0
	PAP Warsaw, POL	Polish	11423.5 14912.5 18648.5
	PETRA Amman, JOR	A	5055.0

1400	PIAB Bonn, D	G	7916.0
	SANA Damascus, SYR	A/E/F	11080.0
	VNA Hanoi, VTN	E	10600.0
	Warsaw R, POL	Polish	7975.0
1415	SUNA Khartoum, SDN	A	15731.0
1430	AA Ankara, TUR	E/F	8137.4
1450	PNA Manila, PHL	E	16788.0
1500	AA Ankara, TUR	E/F	8137.4
		Turk.	18040.0
	GNA Manama, BHR	E	4042.0 14764.0
	INA Baghdad, IRQ	A	14699.0 10162.5
	JANA Tripoli, LBY	A	14573.0
		F	12186.0
	KCNA Pyongyang, KRE	E	8020.0 9395.0 10580.0 11430.0 13780.0
	PANA Dakar, SEN	E/F	16117.0
	PETRA Amman, JOR	A	5055.0 6830.0
	PIAB Bonn, D	G	14458.5 16017.4
	PNA Manila, PHL	E	16788.0
	ROMPRES Bucharest, ROU	F	6972.0
	SANA Damascus, SYR	A/E/F	11080.0
	SUNA Khartoum, SDN	A	15731.0
	Warsaw R, POL	Polish	7975.0
1530	MAP Rabat, MRC	A	18496.1
		F	10213.1 13585.9 18220.9 18265.0
	VNA Hanoi, VTN	F	10600.0
1600	GNA Manama, BHR	E	14764.0
	INA Baghdad, IRQ	A	5867.0 7565.0 14699.0
	JANA Tripoli, LBY	A	14573.0
		E	20560.0
		F	12186.0
	KCNA Pyongyang, KRE	E	8020.0 9395.0 10580.0 11430.0 13780.0
	MAP Rabat, MRC	A	18496.1
		F	10213.1 13585.9 18220.9 18265.0
	PANA Dakar, SEN	E/F	16117.0
	PETRA Amman, JOR	A	6830.0
	PIAB Bonn, D	G	7916.0 9361.9 14458.5 16017.4
	ROMPRES Bucharest, ROU	F	6972.0
	SANA Damascus, SYR	A	3560.0
		A/E/F	11080.0
	SUNA Khartoum, SDN	A	15731.0
	TANJUG Belgrade, SRB	E	12212.5
	VNA Hanoi, VTN	F	10600.0
1615	SUNA Khartoum, SDN	F	19463.0
1630	AA Ankara, TUR	Turk.	8137.4
1650	PNA Manila, PHL	E	16788.0
1700	AA Ankara, TUR	Turk.	8137.4
	GNA Manama, BHR	A	4042.0 14764.0
	Goeteborg R, S	Swed.	2423.5 4268.6 8556.0 12818.0 17024.0
	INA Baghdad, IRQ	A	14699.0
	JANA Tripoli, LBY	A	14573.0
		E	12186.0 20560.0
	MTI Budapest, HNG	E	9114.0
	PANA Dakar, SEN	E/F	16117.0
	PETRA Amman, JOR	E	5055.0 6830.0
	PIAB Bonn, D	G	7916.0 9361.9
	PNA Manila, PHL	E	16788.0

1700	SANA Damascus, SYR	A/E/F	11080.0		
		F	3560.0		
	SUNA Khartoum, SDN	A	15731.0		
		E	19463.0		
	TANJUG Belgrade, SRB	E	7658.0	7806.0	
1730	JANA Tripoli, LBY	F	15462.0		
1800	AA Ankara, TUR	Turk.	8137.4		
	GNA Manama, BHR	A	14764.0		
	INA Baghdad, IRQ	A	7565.0		
	JANA Tripoli, LBY	A	14573.0		
		E	12186.0		
		F	15462.0		
	KCNA Pyongyang, KRE	E	8020.0	11476.0	
		F	9395.0	11536.0	
	PANA Dakar, SEN	E/F	16117.0		
	PAP Warsaw, POL	Polish	11423.5	14912.5	18648.5
	PETRA Amman, JOR	E	5055.0	6830.0	
	ROMPRES Bucharest, ROU	E	6972.0		
	SANA Damascus, SYR	A/E/F	11080.0		
		E	3560.0		
	TANJUG Belgrade, SRB	E	7806.0		
	Warsaw R, POL	Polish	7975.0		
1830	KCNA Pyongyang, KRE	E	12175.0		
1900	GNA Manama, BHR	A	14764.0		
	JANA Tripoli, LBY	E	12186.0		
	KCNA Pyongyang, KRE	E	8020.0	11476.0	12175.0
		F	9395.0	11536.0	
	PANA Dakar, SEN	E/F	16117.0		
	ROMPRES Bucharest, ROU	E	6972.0		
	SANA Damascus, SYR	A/E/F	11080.0		
2000	GNA Manama, BHR	A	14764.0		
	INA Baghdad, IRQ	A	5867.0		
	KCNA Pyongyang, KRE	E	8020.0	11476.0	12175.0
		F	9395.0	11536.0	
	Tors Cove R, NFLD, CAN	E	16844.0		
2100	INA Baghdad, IRQ	A	5867.0		
	TANJUG Belgrade, SRB	E	5240.0	7658.0	
2130	KCNA Pyongyang, KRE	E	11476.0	12175.0	13580.0
		F	9395.0	11430.0	
2200	KCNA Pyongyang, KRE	E	11476.0	12175.0	13580.0
		F	9395.0	11430.0	
	TANJUG Belgrade, SRB	E	13440.0		
2300	KCNA Pyongyang, KRE	F	9395.0	11430.0 ☺	

10 Meteorological RTTY services in alphabetical order

Alphanumerical index of stations transmitting meteorological data and navigational warnings. These are

- air stations forming part of the ICAO AFTN;
- maritime stations serving international merchant shipping;
- meteo stations forming part of the WMO GTS;
- military stations serving air or naval forces.

For NAVTEX stations on 518 kHz please refer to chapter 12.

Listed are

- country;
- name of the station;
- frequency (-ies).

Not listed are

- irregular meteorological bulletins transmitted by military stations;
- harmonic or spurious emissions.

ALASKA

USCG Kodiak	16806.5

AMSTERDAM AND SAINT PAUL

DTRE Martin de Vivies	11551.7 20113.0

ANTARCTIC

DTRE Durmont d'Urville	11576.7

ARGENTINA

AN Puerto Belgrano	8303.5

AZORES

Santa Maria Air	5473.5 9994.0 10539.6 11192.0 14497.5

BENIN

ASECNA Cotonou	5222.0 7524.0

BOSNIA AND HERCEGOVINA

FF Sarajevo	10991.7

BOTSWANA

Gaborone Air	11509.0

BULGARIA

Sofia Meteo	4813.0 11063.0

CANADA

CCG Vancouver, BC	4214.5 8428.5 12599.5 16822.0 22391.5
CF Halifax, NS	122.5 4271.0 6496.4 10536.0 13510.0
CF Victoria, BC	4268.0 6456.0
Tors Cove R, NFLD	4217.5 6329.5 8435.0 12610.5 16844.0

CAPE VERDE

Amilcar Cabral Air, Sal	9154.0

CHILE

CN Magallanes	4813.3
CN Santiago	12961.5

CHINA

Beijing Meteo	3350.0 5180.0 5730.0 7350.0 7815.0 10320.0 12922.0 14340.0
Chengdu Meteo	10470.0
Lanzhou Meteo	4905.0 6985.0
Shanghai R	12649.5
Ürümqi Meteo	3780.0 4470.0 5190.0 11570.0
Wuhan Meteo	4482.0 5315.0 6950.0 7863.0 10650.0 12920.0

COMOROS

ASECNA Moroni	7763.5

CONGO

ASECNA Brazzaville	10132.0 12072.5 14462.5

CROZET ARCHIPELAGO

DTRE Base Alfred-Faure	11421.7

CZECH REPUBLIC

Prague Meteo	3196.0 4336.0

EGYPT

Cairo Meteo	3959.0 7319.0 18254.0

ETHIOPIA

Addis Ababa Air	3850.0 4512.5 6877.8 9462.5

FRANCE

MOD Paris	3628.7 3832.7 5397.7 7642.7 9907.7 10960.7 11518.2 13479.7
Saint Lys R	6320.5 8420.0 12582.5

GERMANY

Grengel Meteo	2195.5 2592.0 2690.7 2822.0 4903.0 4922.5 5083.0 5269.0 7946.5
Hamburg Meteo	147.3 4583.0 7646.0 11039.0 11638.0 14467.3

GUAM

USCG Apra Harbour	12579.0 16806.5

HAWAII

USCG Honolulu	8416.5 12579.0

INDIA

Calcutta Air	3177.5
Delhi Meteo	4060.0 7401.0 7580.0 12075.0 19400.0
IN Mumbai	8298.0 12903.0

IRAN

Tehran Meteo	10686.0 17553.0

IRELAND

IN Dublin	4601.5
Shannon Air	3250.0 8145.0

ITALY

Rome Meteo	3172.5 5887.5 11453.0

KENYA

Nairobi Air	7423.0 8165.0 13366.5 13373.5 13737.3
Nairobi Meteo	7461.0 9041.0 10384.6 16183.0 17441.5

KERGUELEN ISLANDS

DTRE Port-aux-Francais	9250.7 10112.0 14438.2 20113.0

KOREA (REPUBLIC OF)

Soul Meteo	5912.7 7433.5 11645.0

LATVIA

Riga R	6341.5 16955.0

LIBYA

Tripoli Air	11494.6 18388.6

LITHUANIA

Klaipeda R	6439.0 12895.0

MADAGASCAR

Antananarivo Meteo	3558.0 7552.5 17400.0
ASECNA Antananarivo	4012.2 7831.5 9192.6

MALI

ASECNA Bamako	7626.0

MARTINIQUE

FF Fort de France	10798.3

MAURITIUS

Plaisance Air	4023.5 9378.5
Vacoas Meteo	3188.0 7693.0

NIGER

ASECNA Niamey	5160.0 7596.0

POLAND

Warsaw Meteo	111.3 129.5

PUERTO RICO

USAF AWS Roosevelt Roads, Ceiba	7784.0 11118.0 13835.0 19359.0

REUNION

FF Le Port	13846.7
Saint Denis Meteo	4440.0 8176.0 16335.0

ROMANIA

Bucharest Meteo	4002.0 4045.0 5400.0 5731.0

RUSSIAN FEDERATION

Arkhangelsk Meteo	7760.0
Irkutsk Meteo, SE	4560.0

SAUDI ARABIA

Jeddah Meteo	3745.0 4570.0 7510.0 7625.0 10215.0 11125.0 17590.0 23370.0

SENEGAL

ASECNA Dakar	6975.0 10407.0
Dakar Meteo	19747.5

SINGAPORE

Singapore R	6323.5 8420.5 12579.5 16807.0 22381.0

SOUTH AFRICA (REPUBLIC OF)

Cape Town R	4214.0 8428.5 12601.0 16816.0
Pretoria Meteo	4018.0 7512.0 13542.0 18242.0

SPAIN

SN Madrid	6388.0 8528.5 13059.0 17018.0

SUDAN

Khartoum Air	13996.5 18173.5

THAILAND

Bangkok Meteo	10169.0 10299.0 17521.0

TURKEY

Ankara Meteo	3550.0 10423.0

UKRAINE

Mariupol R	4265.0 8422.5 8540.0 12697.0 16829.0 17141.6

UNITED KINGDOM

BA London	4500.0 12115.0
Bracknell Meteo	4489.0 6835.0 10551.3 14356.0 18230.0
Portishead R	3542.7 4211.0 6315.0 8417.0 16807.5
RN London	9147.0

UNITED STATES OF AMERICA

Chatham R, MA	4216.5 6324.0 8424.0 8426.5 12598.0 16817.0 16825.0 22386.5
Mobile R, AL	4250.0 4343.0 6325.5 6344.0 6416.0 8419.0 8514.0 8534.0 12886.5 12992.0 16997.6 17022.5
Ocean Gate R, NJ	4212.5
Rogers City R, MI	4212.0
San Francisco R, CA	4216.0 6314.5 6320.0 8417.5 8422.5 12580.5 12585.5 12600.0
Slidell R, LA	12607.5 16816.0 16834.5
USAF AWS Offutt AFB, Omaha, NE	3228.0 5904.0
USCG Boston, MA	6314.0 8416.5 12579.0 16806.5
USCG San Francisco, CA	8416.5 16806.5 22376.0

UZBEKISTAN

Tashkent Meteo	3750.0 5430.0 10130.0

UNID

stations	6395.0 6933.0 9152.2 10212.0 10998.8 ☺

11 Meteorological radiofax schedules in alphabetical order

Schedules of meteorological and other radio stations transmitting fax information, in alphabetical order.

Listed are

- country;
- name of the station;
- frequencies and call signs;
- technical parameters (e.g. → 120/576 = 120 rpm / IOC 576);
- schedule.

- transmission start time;
- plain text description; or abbreviated heading, consisting of
  - data and / or form designator t_1t_2 (for decoding see the table below, and chapter 4 in our RADIO DATA CODE MANUAL);
  - geographical designator A_1 (for decoding see the table below, and chapter 4 in our RADIO DATA CODE MANUAL);
  - reference time designator A_2 (for decoding see the table below, and chapter 4 in our RADIO DATA CODE MANUAL);
  - level designator *ii* (see the table below, and chapter 4 in our RADIO DATA CODE MANUAL);
  - ICAO international four-letter location indicator *CCCC* of the station originating or compiling the bulletin (for decoding see the table below, and chapter 11 in our RADIO DATA CODE MANUAL);
  - reference or observation time, or the validity time indicated either as a fixed time (e.g. VT1800) or as a function of the reference time (e.g. H+24);
- chart details such as pressure levels etc.

Example 1: "0940 ASTU LTAA 0600" means "transmission start time 0940 UTC; surface analysis; Turkey; originating or compiling station Ankara (Sehir-City/MOT/FIR/ACC/FIC); reference time 0600 UTC".

Example 2: "0700 FUXN BABJ 500 hPa (H+48)" means "transmission start time 0700 UTC; upper-air prognosis; Northern Hemisphere; originating or compiling station Peking (Beijing); pressure level 500 hectopascal; validity time 48 hours".

Example 3: "1832 PWRF25 RUMS 250 hPa VT0000 (H+30)" means "transmission start time 1832 UTC; pictorial information; wind; geographical area R (national designation for regional and global dissemination); 30 hours forecast; standard level 250 hectopascal; originating or compiling station Moscow; standard level 250 hectopascal; validity time 0000 UTC; validity time 30 hours".

Several stations give the chart identification number $F_1F_2F_3F_4$ in one corner of the chart (examples see chapter 11 in our GUIDE TO WORLDWIDE WEATHERFAX SERVICES), consisting of

- chart originating centre indicator F_1F_2 (for decoding see chapter 4 in our RADIO DATA CODE MANUAL);
- chart serial number F_3F_4 in the series of charts distributed by that centre.

Example: Chart identification number "4137" indicates "chart number 37 distributed by RMC/AFC Buenos Aires".

Note: These schedules are modified frequently. Completely revised and updated schedules will be published in the next edition of our GUIDE TO WORLDWIDE WEATHERFAX SERVICES.

A_1 Geographical area designator

A	Northern hemisphere 0° - 90° W
B	Northern hemisphere 90° W - 180°
C	Northern hemisphere 180° - 90° E
D	Northern hemisphere 90° E - 0°
E	Tropical belt 0° - 90° W
F	Tropical belt 90° W - 180°
G	Tropical belt 180° - 90° E
H	Tropical belt 90° E - 0°
I	Southern hemisphere 0° - 90° W
J	Southern hemisphere 90° W - 180°
K	Southern hemisphere 180° - 90° E
L	Southern hemisphere 90° E - 0°
M	Europe
N	Europe
O	Europe
P	Europe
Q	Northern Hemisphere
R	Germany
S	North Atlantic

A_2 Reference time designator

A	Analysis (00 hour)
B	6 hours forecast
C	12 hours forecast
D	18 hours forecast
E	24 hours forecast
F	30 hours forecast
G	36 hours forecast
H	42 hours forecast
I	48 hours forecast
J	60 hours forecast
K	72 hours forecast
L	84 hours forecast
M	96 hours forecast
N	108 hours forecast
O	120 hours forecast (5 days)
P	132 hours forecast
Q	144 hours forecast
R	156 hours forecast
S	168 hours forecast (7 days)
T	10 days forecast
U	15 days forecast
V	30 days forecast

A_1A_2 Geographical designator (the old system is still used by certain stations)

AA	Antarctic
AB	Albania
AC	Arctic
AE	South-East Asia
AF	Africa
AG	Argentina
AH	Afghanistan
AI	Ascension
AK	Alaska
AL	Algeria
AM	Central Africa
AN	Angola
AO	West Africa
AP	Southern Africa
AR	Arabian Sea area
AS	Asia
AT	Antigua region
AU	Australia
AW	Near East
AZ	Azores
BA	Bahamas
BC	Botswana
BD	Brunei
BE	Bermuda
BH	Belize
BI	Burundi
BJ	Benin
BK	Banks Islands
BM	Myanmar
BN	Bahrain
BO	Bolivia
BQ	Baltic Sea area
BR	Barbados
BU	Bulgaria
BV	Bouvet Island
BW	Bangla Desh
BX	Belgium and Luxemburg
BY	Belarus
BZ	Brazil
CA	Caribbean area and Central America
CD	Chad
CE	Central African Republic
CG	Congo
CH	Chile
CI	China

A_1A_2 *(cont.)*	CM	Cameroon
	CN	Canada
	CO	Colombia
	CR	Canary Islands
	CS	Costa Rica
	CT	Canton Island
	CU	Cuba
	CV	Cape Verde
	CY	Cyprus
	CZ	Czech Republic and Slovakia
	DJ	Djibouti
	DL	Germany
	DN	Denmark
	DO	Dominica
	DR	Dominican Republic
	EA	East Africa
	EC	East China Sea area
	EE	Eastern Europe
	EG	Egypt
	EM	Middle Europe
	EN	Northern Europe
	EQ	Ecuador
	ER	United Arab Emirates
	ES	El Salvador
	ET	Ethiopia
	EU	Europe
	EW	Western Europe
	FA	Faeroes
	FE	Far East
	FG	Guiana (French)
	FI	Finland
	FJ	Fiji
	FK	Falkland Islands (Malvinas) and Dependencies
	FP	Saint Pierre and Miquelon
	FR	France
	FW	Wallis and Futuna Islands
	GA	Gulf of Alaska area
	GB	Gambia
	GC	Cayman Islands
	GD	Grenada
	GE	Gough Island
	GH	Ghana
	GI	Gibraltar
	GL	Greenland
	GM	Guam
	GN	Guinea
	GO	Gabon
	GQ	Equatorial Guinea
	GR	Greece
	GU	Guatemala
	GW	Guinea-Bissau
	GX	Gulf of Mexico area
	GY	Guyana
	HA	Haiti
	HE	Saint Helena
	HK	Hong Kong
	HO	Honduras
	HU	Hungary
	HV	Bourkina Faso
	HW	Hawaii
	IC	Comoros
	ID	Indonesia
	IE	Ireland
	IL	Iceland
	IN	India
	IO	Indian Ocean area
	IQ	Iraq
	IR	Iran
	IS	Israel
	IV	Ivory Coast
	IY	Italy
	JD	Jordan
	JM	Jamaica
	JP	Japan
	KA	Caroline Islands
	KB	Kiribati
	KI	Christmas Island
	KK	Cocos (Keeling) Islands
	KN	Kenya
	KO	Korea (Republic of)
	KP	Cambodia
	KR	Korea (Undemocratic People's Republic of)
	KU	Cook Islands
	KW	Kuwait
	LA	Laos
	LB	Lebanon
	LC	Saint Lucia
	LI	Liberia
	LN	Southern Line Islands
	LS	Lesotho
	LU	Aleutian Islands
	LY	Libya
	MA	Mauritius
	MB	Marion Island
	MC	Morocco
	MD	Madeira
	ME	Eastern Mediterranean area
	MF	Guadeloupe region
	MG	Madagascar
	MH	Marshall Islands
	MI	Mali
	MK	Macquarie Island
	ML	Malta
	MM	Mediterranean area
	MN	St. Maarten region
	MO	Mongolia
	MP	Central Mediterranean area
	MQ	Western Mediterranean area
	MR	Martinique
	MS	Malaysia (Peninsular)
	MT	Mauritania
	MU	Macao
	MV	Maldives
	MW	Malawi
	MX	Mexico
	MY	Mariana Islands
	MZ	Mozambique
	NA	North America

A_1A_2 *(cont.)*	NB	Malaysia (Sabah)
	NC	New Caledonia and Dependencies
	NF	Norfolk
	NG	Papua New Guinea
	NI	Nigeria
	NK	Nicaragua
	NL	Netherlands
	NM	Namibia
	NO	Norway
	NP	Nepal
	NR	Niger
	NT	North Atlantic area
	NU	Netherlands Antilles
	NV	Vanuatu
	NW	Nauru
	NZ	New Zealand
	OC	Oceania
	OH	Sea of Okhotsk
	OM	Oman
	OR	South Orkney Islands
	OS	Austria
	PA	Pacific area
	PE	Persian Gulf area
	PF	Polynesia (French)
	PH	Philippines
	PI	Phoenix Islands
	PK	Pakistan
	PL	Poland
	PM	Panama
	PN	North Pacific area
	PO	Portugal
	PQ	Western North Pacific
	PR	Peru
	PS	South Pacific area
	PT	Pitcairn Island
	PU	Puerto Rico
	PW	Western Pacific area
	PY	Paraguay
	PZ	Eastern Pacific area
	QT	Qatar
	RA	Commonwealth of Independent States (Asia)
	RE	Reunion and Dependencies
	RO	Romania
	RS	Commonwealth of Independent States (Europe)
	RW	Rwanda
	SA	South Africa
	SB	Sri Lanka
	SC	Seychelles
	SD	Saudi Arabia
	SE	Southern Ocean area
	SG	Senegal
	SI	Somalia
	SJ	Sea of Japan area
	SK	Malaysia (Sarawak)
	SL	Sierra Leone
	SM	Suriname
	SN	Sweden
	SO	Solomon Islands
	SP	Spain
	SR	Singapore
	SS	South China Sea area
	ST	South Atlantic area
	SU	Sudan
	SV	Swaziland
	SW	Switzerland
	SX	Santa Cruz Islands
	SY	Syria
	SZ	Spitsbergen
	TC	Tristan da Cunha
	TD	Trinidad and Tobago
	TG	Togo
	TH	Thailand
	TI	Turks and Caicos Islands
	TK	Tokelau Islands
	TM	Timor
	TN	Tanzania
	TO	Tonga
	TP	Sao Tome and Principe
	TS	Tunisia
	TU	Turkey
	TV	Tuvalu
	UG	Uganda
	UK	United Kingdom
	UR	Ukrainia
	US	United States of America
	UY	Uruguay
	VI	Virgin Islands
	VN	Venezuela
	VS	Viet Nam
	WK	Wake Island
	XE	Eastern hemisphere
	XN	Northern hemisphere
	XS	Southern hemisphere
	XT	Tropical belt
	XW	Western hemisphere
	XX	For use when other designators are not appropriate
	YE	Yemen
	YG	Yugoslavia
	ZA	South Africa (Republic of)
	ZB	Zambia
	ZM	Samoa (Western)
	ZR	Zaire
	ZW	Zimbabwe

CCCC ICAO international four-letter location indicator of the station originating or compiling the bulletin

BABJ	Peking (Beijing)
DEMS	New Delhi
EDZG	Oldenburg (Mil MET Sub Centre North West)
EDZL	Flensburg (Mil MET Sub Centre North)
EDZW	Offenbach (MET COM Centre)
EDZX	Traben-Trarbach (Mil MET COM Centre)
EGRR	Bracknell
EKMI	Danish Meteorological Institute
ETGG	Flensburg/Meierwik
ETGX	Air Force Geophysics
FAPR	Pretoria (MET)
FMEE	Saint-Denis/Gillot
GOOY	Dakar/Yoff
HECA	Cairo/Intl
HKNC	Nairobi (DCA-HQ/MET-HQ/TEL/AIS-HQ/ARB)
KAWN	Carswell (USAF Automatic Digital Weather Switch), TX
KWBC	Washington (NWS National MET Center), DC
KGWC	Offutt AFB, Omaha, NE (USAF Global Weather Center)
LEMM	Madrid (Centro Nacional de MET COM y MOTNE)
LERT	Rota (NAS)
LFPW	Toulouse Centre Meteorologique
LIIB	Roma (MET/COM Centre)
LTAA	Ankara (Sehir-City/MOT/FIR/ACC/FIC)
OKPR	Praha/Komorany
RJTD	Tokyo (City)
RKSL	Seoul City (KCAB)
RUHB	Khabarovsk
RUMS	Moscow
RUNW	Novosibirsk
RUTK	Tashkent
SABM	Buenos Aires (Servicio Meteorologico Nacional), CF
VTBB	Bangkok (ACC/FIC)
YMMC	Melbourne (World MET Centre)
YPDM	Darwin (Regional Forecasting Centre)

ii Level designator. The designator given is the hundreds and tens digits of the hectopascal level in the atmosphere

00	surface
01-19	pressure levels at 50 hPa intervals from 1000 hPa to 100 hPa
20-29	remaining standard levels above 100 hPa
30-39	could be used for tropopauses, maximum winds, etc.
40-59	spare (e.g. for use for mesoscale model levels)
60-79	for regional use
80-99	for national use

ii Level designator (old system still used by certain stations):

03	30 hPa level
..	...
85	850 hPa level
94	level of 0° C isotherm
96	level of the maximum wind
97	level of the tropopause
98	surface of the earth or ocean
99	1000 hPa level

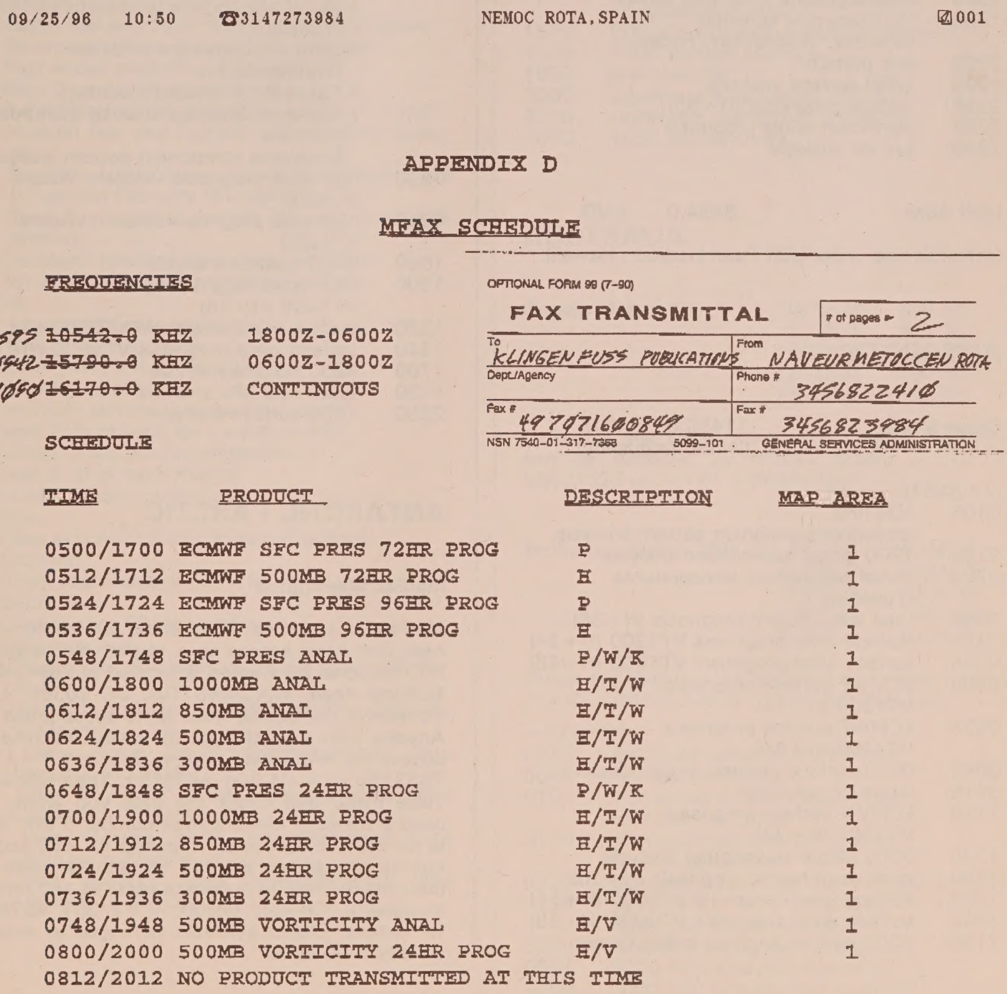
t_1t_2 Data type and/or form designator

A	**Analyses**
AH	Thickness analyses
AI	Ice analyses (ICEAN)
AO	Status of ozone layer
AR	Radar analyses
AT	Satellite analyses (SAREP)
AS	Coded surface analyses (IAC, IAC FLEET)
AU	Coded upper-air analyses (IAC)
AX	Miscellaneous analyses
C	**Climatic data**
CA	Climatic anomalies
CE	Monthly means (upper-air) (CLIMAT TEMP SHIP)
CH	Monthly means (surface) (CLIMAT SHIP)
CO	Monthly means (oceanic areas) (CLINP, CLISA, INCLI, NACLI, SPCLI)
CS	Monthly means (surface) (CLIMAT)
CU	Monthly means (upper-air) (CLIMAT TEMP)
E	**Satellite imagery data**
EC	Cloud top temperature
EF	Fog
EI	Infrared
ES	Surface temperature
EV	Visible
EW	Water vapour
EY	User specified
EZ	Unspecified
F	**Forecasts**
FA	Aviation (area) forecasts (ARFOR)
FB	Aviation (upper winds and temperature) (ARMET) (or other) forecasts
FC	Aerodrome forecasts (TAF) (validity time up to 12 hours)
FE	Extended forecasts
FF	Shipping forecasts (IAC FLEET)
FG	Hydrological forecasts (HYFOR)
FH	Upper-air thickness prognoses
FJ	Radio warning service (including IUWDS data)
FM	Temperature extreme forecasts
FP	Public forecasts
FQ	Other shipping forecasts
FR	Aviation (route) forecasts (ROFOR)
FS	Coded surface forecasts (IAC, IAC FLEET)
FT	Aerodrome forecasts (TAF) (validity time more than 12 hours)
FU	Coded upper-air forecasts (IAC)
FW	Winter sports forecasts
FX	Miscellaneous forecasts
FZ	Shipping (area) forecasts (MAFOR)
O	**Oceanographic products (GRIB)**
OD	Depth
OE	Ice concentration
OF	Ice thickness
OG	Ice drift
OH	Ice growth
OI	Ice convergence/divergence
OQ	Temperature anomaly
OR	Depth anomaly
OS	Salinity
OT	Temperature
OU	Current component
OV	Current component
OW	Temperature warming

t_1t_2 *(cont.)*	OX	Mixed data
	P	**Pictorial information**
	PA	Radar data
	PB	Cloud
	PC	Clear air turbulence
	PD	Thickness (relative topography)
	PE	Precipitation
	PF	Aerological diagrams
	PG	Significant weather
	PH	Height
	PI	Ice flow
	PJ	Wave height and combinations
	PK	Swell height and combinations
	PL	Plain language
	PM	For national use
	PN	Radiation
	PO	Vertical velocity
	PP	Pressure
	PQ	Wet bulb potential temperature
	PR	Relative humidity
	PS	Snow cover
	PT	Temperature
	PU	Eastward wind component
	PV	Northward wind component
	PW	Wind
	PX	Lifted index
	PY	Observational plotted chart
	Q	**Pictorial information for regional use**
	QA	Radar data
	QB	Cloud
	QC	Clear air turbulence
	QD	Thickness (relative topography)
	QE	Precipitation
	QF	Aerological diagrams
	QG	Significant weather
	QH	Height
	QI	Ice flow
	QJ	Wave height and combinations
	QK	Swell height and combinations
	QL	Plain language
	QM	For national use
	QN	Radiation
	QO	Vertical velocity
	QP	Pressure
	QQ	Wet bulb potential temperature
	QR	Relative humidity
	QS	Snow cover
	QT	Temperature
	QU	Eastward wind component
	QV	Northward wind component
	QW	Wind
	QX	Lifted index
	QY	Observational plotted chart
	S	**Surface data**
	SA	Aviation routine reports (METAR)
	SB	Radar reports (RADOB part A)
	SC	Radar reports (RADOB part B)
	SD	Radar reports (RADOB parts A and B)
	SE	Seismic data
	SF	Atmospherics reports (SFAZI, SFAZU, SFLOC)

t_1t_2 *(cont.)*	SI	Synoptic reports at intermediate hours (SYNOP, SHIP)
	SM	Synoptic reports at main synoptic hours (SYNOP, SHIP)
	SN	Synoptic reports at non-standard hours (SYNOP, SHIP)
	SO	Oceanographic data (BATHY, TESAC, WAVEOB)
	SP	Special weather reports (SPECI)
	SR	Hydrological (river) reports (HYDRA)
	SS	Drifting buoy reports (DRIFTER)
	ST	Sea-ice information
	SU	Snow depth
	SV	Lake-ice information
	SX	Miscellaneous surface data
	U	**Upper-air data**
	UA	Aircraft reports (AIREP)
	UC	Constant-level balloon data (COLBA)
	UD	Aircraft reports (AMDAR)
	UE	Upper-level pressure, temperature, humidity and wind reports (TEMP, TEMP SHIP part D)
	UF	Upper-level pressure, temperature, humidity and wind reports (TEMP, TEMP SHIP parts C and D)
	UG	Upper-wind reports (PILOT, PILOT SHIP part B)
	UH	Upper-wind reports (PILOT, PILOT SHIP part C)
	UI	Upper-wind reports (PILOT, PILOT SHIP parts A and B)
	UK	Upper-level pressure, temperature, humidity and wind reports (TEMP, TEMP SHIP part B)
	UL	Upper-level pressure, temperature, humidity and wind reports (TEMP, TEMP SHIP part C)
	UM	Upper-level pressure, temperature, humidity and wind reports (TEMP, TEMP SHIP parts A and B)
	UN	Rocketsonde data (ROCOB, ROCOB SHIP)
	UP	Upper-wind reports (PILOT, PILOT SHIP part A)
	UQ	Upper-wind reports (PILOT, PILOT SHIP part D)
	UR	Aircraft reports (RECCO)
	US	Upper-level pressure, temperature, humidity and wind reports (TEMP, TEMP SHIP part A)
	UT	Aircraft reports (CODAR)
	UX	Miscellaneous upper-air data
	UY	Upper-wind reports (PILOT, PILOT SHIP parts C and D)
	UZ	Upper-level pressure, temperature, humidity and wind reports from a sonde released by carrier balloon or aircraft (TEMP DROP)
	V	**National data**
	VA	Radar data
	VB	Cloud
	VC	Clear air turbulence
	VD	Thickness (relative topography)
	VE	Precipitation
	VF	Aerological diagrams
	VG	Significant weather
	VH	Height
	VI	Ice flow
	VJ	Wave height and combinations
	VK	Swell height and combinations
	VL	Plain language
	VM	For national use
	VN	Radiation
	VO	Vertical velocity
	VP	Pressure
	VQ	Wet bulb potential temperature
	VR	Relative humidity
	VS	Snow cover
	VT	Temperature

t_1t_2 *(cont.)*	VU	Eastward wind component
	VV	Northward wind component
	VW	Wind
	VX	Lifted index
	VY	Observational plotted chart
	W	**Warnings**
	WE	Tsunami
	WH	Hurricane warnings
	WN	Data related to nuclear accident
	WO	Other warnings
	WS	SIGMET
	WT	Tropical cyclone warnings (typhoon)
	WW	Warning and weather summary



09/25/96 10:50 ☎3147273984 NEMOC ROTA, SPAIN ☑001

APPENDIX D

MFAX SCHEDULE

FREQUENCIES

7595 ~~10542.0~~ KHZ 1800Z-0600Z
10542 ~~15790.0~~ KHZ 0600Z-1800Z
9050 ~~16170.0~~ KHZ CONTINUOUS

OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL # of pages ► 2

To KLINGENFUSS PUBLICATIONS
From NAVEURMETOCCEN ROTA
Dept./Agency
Phone # 3456822410
Fax # 497071600849
Fax # 3456823984
NSN 7540-01-317-7368 5099-101 GENERAL SERVICES ADMINISTRATION

SCHEDULE

TIME	PRODUCT	DESCRIPTION	MAP AREA
0500/1700	ECMWF SFC PRES 72HR PROG	P	1
0512/1712	ECMWF 500MB 72HR PROG	H	1
0524/1724	ECMWF SFC PRES 96HR PROG	P	1
0536/1736	ECMWF 500MB 96HR PROG	H	1
0548/1748	SFC PRES ANAL	P/W/K	1
0600/1800	1000MB ANAL	H/T/W	1
0612/1812	850MB ANAL	H/T/W	1
0624/1824	500MB ANAL	H/T/W	1
0636/1836	300MB ANAL	H/T/W	1
0648/1848	SFC PRES 24HR PROG	P/W/K	1
0700/1900	1000MB 24HR PROG	H/T/W	1
0712/1912	850MB 24HR PROG	H/T/W	1
0724/1924	500MB 24HR PROG	H/T/W	1
0736/1936	300MB 24HR PROG	H/T/W	1
0748/1948	500MB VORTICITY ANAL	H/V	1
0800/2000	500MB VORTICITY 24HR PROG	H/V	1
0812/2012	NO PRODUCT TRANSMITTED AT THIS TIME		

USN Rota recently changed their fax schedule completely - see page 481

ALASKA

USCG Kodiak 4298.0 NOJ
8459.0 NOJ

→ 120/576

0400	test pattern
0404	0000 surface analysis
0425	coastal marine forecast tables
0438	surface prognosis days 3, 4 and 5
1000	test pattern
1004	0600 surface analysis
1025	surface prognosis (H+36)
1037	5-day sea ice prognosis
1049	sea surface temperature analysis
1800	test pattern
1804	1200 surface analysis
1825	coastal marine prognosis tables
1838	NOJ facsimile schedule (Monday, Wednesday, Friday)
2200	test pattern
2204	1800 surface analysis
2225	surface prognosis (H+36)
2237	significant wave prognosis
2249	sea ice analysis

USN Adak 8494.0 NUD

(schedule see under USN Pearl Harbour, Hawaii)

ANTARCTIC

Casey Meteo 11455.0 VLM
(winter frequency)

→ 120/576

0105	500 hPa longwave component pattern analysis
0125	1200 global assimilation analysis
0200	global sea surface temperatures (Tuesday)
0405	total wave height prognosis (H+36)
0420	surface wind prognosis VT1200 (H+24)
0435	surface wind prognosis VT1200 (H+48)
0505	ECMWF surface prognosis VT1200 (H+24)
0535	ECMWF surface prognosis VT1200 (H+48)
0845	0000 surface analysis Indian Ocean
0915	latest HF schedule
1110	ECMWF surface prognosis VT1200 (H+72)
1300	0000 global assimilation analysis
1320	total wave height prognosis (H+36)
1340	surface wind prognosis VT0000 (H+24)
1400	surface wind prognosis VT0000 (H+48)
2130	1200 surface analysis Indian Ocean

7470.0 VLM
(summer frequency)

→ 120/576

0000	high seas prognosis VT0000 Western waters
0020	high seas prognosis VT0000 Eastern waters
0200	surface wind prognosis VT1200 (H+24)
0220	manual surface prognosis VT1200 (H+12)
0300	manual surface prognosis VT1200 (H+36)
0420	0000 surface analysis
0440	surface wind prognosis VT1200 (H+48)
0505	0000 500 hPa analysis
0535	ECMWF surface prognosis VT1200 (H+72)
0845	• latest HF schedule (Monday, Friday) • global sea surface temperatures (Tuesday) • Joint Ice Centre ice analysis (Wednesday) • Casey ice analysis (Thursday) • Mawson/Davis ice analysis (Saturday) • 500 hPa longwave component pattern analysis
0920	high seas prognosis Western Waters VT1200
0940	high seas prognosis Eastern Waters VT1200
1000	0600 surface analysis
1300	total wave height prognosis VT1200 (H+36)
1320	surface wind prognosis VT0000 (H+24)
1340	surface wind prognosis VT0000 (H+48)
1700	1200 surface analysis
1730	1200 500 hPa analysis
2230	1800 surface analysis

ANTARCTIC / ARCTIC

MetFax Washington

MetFax is a dial-up weatherfax service for mariners that have access to a telefax machine. The NIC (National Ice Center) is located at FB#4, 4251 Suitland Road, WASHINGTON, DC 20395, USA. To receive the charts, there is no subscription fee. Anyone with a touch-tone (!) telefax machine can access the autopolling system. Just call ++1 301 7633190 or ++1 301 7633191. Then follow the voice menu and select the data you want. You need a personal identification number (PIN). There is no cost or agreement required for PIN access, but its use allows the NIC to identify users and requests in order to maximize services and product availability. Contact telefax ++1 301 4575305 for details. Charts available (arranged in order of validity time) cover

- Monday:
  - Antarctic edge update and prognosis (H + 72) (November to mid-March);
  - Great Lakes analysis;
  - Northern Hemisphere iceberg limit (during the IIP season February through August);
  - Ross Sea regional analysis (November to mid-March);
  - Saint Mary's river analysis;
- Tuesday:
  - Alaskan regional analysis;
- Wednesday:
  - Canadian archipelago regional analysis;
  - East Siberian / Laptev regional analysis;
  - Great Lakes analysis;
  - Saint Mary's river analysis;
  - Sea of Okhotsk, Japan, and Yellow Sea regional analysis;
  - West Arctic analysis/prognosis;
- Thursday:
  - Baffin Bay and Davis Strait regional analysis;
  - Barents and Kara Sea regional analysis;
  - East Arctic analysis/prognosis;
  - East Greenland regional analysis;
  - full Antarctic analysis and prognosis (H + 96);
  - Hudson Bay and Labrador Sea regional analysis;
  - Northern Hemisphere iceberg limit (during the IIP season February through August);
  - Ross Sea regional analysis (November to mid-March);
  - Southern Hemisphere iceberg positions;
  - White and Baltic Sea regional analysis;
- Friday:
  - Alaskan regional analysis;
  - Great Lakes analysis;
  - Saint Mary's river analysis;
- 7th of each month:
  - monthly summary of Arctic buoys;
- 1st and 15th of each ice season month:
  - Great Lakes 30-day prognosis;
- 7th and 21st of each month:
  - Arctic 30-day prognosis;
- 15 May:
  - East and West Arctic seasonal outlook;
- 15 October:
  - Ross Sea seasonal outlook;
- 01 December:
  - Great Lakes 90-day prognosis;
- irregular intervals:
  - Chesapeake Bay analysis (December to February);
  - Lake Erie aerial reconnaissance data (January to March);
  - Lake Huron aerial reconnaissance data (January to March);
  - Lake Michigan aerial reconnaissance data (January to March);
  - Lake Ontario aerial reconnaissance data (January to March);
  - Lake Superior aerial reconnaissance data (January to March).

ARGENTINA

Buenos Aires Meteo	10720.0	LRB 72
	18621.5	LRO 84

→ 120/576

0800	1000 hPa prognosis
0810	thickness 1000/500 hPa analysis/prognosis
0820	500 hPa isotachs analysis/prognosis
0830	0600 surface analysis
0840	significant weather FL 100/250
0850	significant weather FL 250/450
0900	schedule
1410	1200 surface analysis
1420	1200 nephanalysis
1900	1000 hPa analysis/prognosis
1910	thickness 1000/500 hPa analysis/prognosis
1920	500 hPa isotachs analysis/prognosis
1930	1800 surface analysis
1950	pronolas (?!)
2000	significant weather FL 100/250
2010	significant weather FL 250/450
2020	1800 nephanalysis

AUSTRALIA

Darwin Meteo, NT	5755.0	AXI 32
	7535.0	AXI 33
	10555.0	AXI 34
	15615.0	AXI 35
	18060.0	AXI 36

(schedule see under Melbourne - latest schedule can be obtained by telefax polling + + 61 3 96621223 or + + 61 3 96621222)

Melbourne Meteo, VIC	2628.0	AXM 31
	5100.0	AXM 32
	11030.0	AXM 34
	13920.0	AXM 35
	20469.0	AXM 37

(latest schedule can be obtained by telefax polling + + 61 3 96621223 or + + 61 3 96621222)

→ 120/576

0015	AXI/AXM schedule (two parts)
0045	information notice
0100	IPS recommended frequencies for AXM reception
0130	IPS recommended frequencies for AXI reception
0200	MSL prognosis Australia VT0000 (H + 24)
0215	significant weather prognosis Australian Region VT1800
0230	current warnings summary
0245	0000 MSL analysis Australia
0300	0000 500 hPa analysis Australia
0330	Darwin Tropics significant weather prognosis VT1800

0400 500 hPa prognosis VT0000 (H+24)
0430 sea surface isotherms Southeast Australia (weekly)
0445 250 m isotherms Southeast Australia (weekly)
0500 sea surface isotherms Southwest Australia (weekly)
0600 gradient level wind analysis VT0000 part A
0623 gradient level wind analysis VT0000 part B
0645 0000 MSL pressure analysis
0715 significant weather prognosis VT0000 Australia
0730 0000 analysis Indian Ocean
0745 wind waves height prognosis Australia VT0000 (H+24)
0800 swell waves height prognosis Australia VT0000 (H+24)
0815 current warnings summary
0830 0000 MSL analysis South Pacific
0845 0600 MSL analysis Australia
0903 0000 250 hPa streamline analysis
0923 0000 500 hPa streamline analysis
0941 0000 700 hPa streamline analysis
1000 Darwin Tropics significant weather prognosis VT0000
1030 500 hPa prognosis Southern Hemisphere VT0000 (H+48)
1045 MSL prognosis Southern Hemisphere VT0000 (H+48)
1115 0000 500 hPa analysis Southern Hemisphere
1130 sea surface temperature analysis (weekly)
1200 MSL prognosis Australia VT1200 (H+36)
1215 AXI/AXM schedule (two parts)
1245 MSL prognosis Indian Ocean VT1200 (H+36)
1300 significant weather prognosis Australia VT0600
1315 total waves prognosis Southwest Pacific VT0000 (H+48)
1330 total waves prognosis Indian Ocean VT0000 (H+48)
1345 weekly sea surface temperatures Southwest Pacific
1400 weekly sea surface temperatures Indian Ocean
1430 1200 MSL analysis Australia
1445 current warnings summary
1500 500 hPa prognosis Australia VT1200
1515 MSL prognosis Australia VT1200 (H+36)
1530 Darwin Tropics significant weather prognosis VT0600
1600 500 hPa prognosis Australia VT1200 (H+24)
1800 gradient level wind analysis VT1200 part A
1823 gradient level wind analysis VT1200 part B
1900 significant weather prognosis Australia VT1200
1915 1200 MSL analysis Indian Ocean
1930 wind waves height prognosis Australia VT1200 (H+24)
1945 swell waves height prognosis Australia VT1200 (H+24)
2000 1200 MSL analysis Southwest Pacific
2015 1800 MSL analysis Australia
2045 current warnings summary
2100 1200 250 hPa streamline analysis
2120 1200 500 hPa streamline analysis
2140 1200 700 hPa streamline analysis
2200 Darwin Tropics significant weather prognosis VT1200
2230 500 hPa prognosis Southern Hemisphere VT1200 (H+48)
2245 MSL prognosis Southern Hemisphere VT1200 (H+48)
2303 1200 500 hPa analysis Southern Hemisphere
2330 MSL prognosis Australia VT0000 (H+36)
2345 MSL prognosis Indian Ocean VT1200 (H+48)

CANADA

CCG Iqaluit, NWT 3253.0 VFF
7710.0 VFF

→ 120/576
0300 ice prognosis (H+24) Labrador Coast, Davis Strait and Baffin Bay
0900 0600 surface analysis and prognosis (H+18)
0936 ice analysis Hudson Bay South, Hudson Bay North, Hudson Strait, Foxe Basin, Labrador Coast, Davis Strait and Baffin Bay
2000 ice analysis Hudson Bay South, Hudson Bay North, Hudson Strait, Foxe Basin, Labrador Coast, Davis Strait and Baffin Bay
2200 1800 surface analysis and prognosis (H+18)

CCG Resolute, NWT 3253.0 VFR
7710.0 VFR

→ 120/576
1200 0600 surface analysis and prognosis (H+18)
1236 ice analysis Baffin Bay, Approaches to Resolute, Eureka Sound, Parry Channel, Queen Maude - Prince Regent, and Amundsen Gulf
2300 1800 surface analysis and prognosis (H+18)
2336 ice analysis Baffin Bay, Approaches to Resolute, Eureka Sound, Parry Channel, Queen Maude - Prince Regent, and Amundsen Gulf, and prognosis (H+24)

CF Halifax, NS	122.5	CFH
	4271.0	CFH
	6496.4	CFH
	10536.0	CFH
	13510.0	CFH

→ 120/576

0001	ice chart Labrador (if available)
0201	significant weather depiction VT1200
0301	American 3-5 day prognosis
0321	surface analysis 0000
0401	500 hPa analysis 0000
0501	isobaric prognosis VT0000 (H+24)
0520	• fleet broadcast schedule (Monday, Wednesday, Friday) • test chart (Sunday, Tuesday, Thursday, Saturday)
0601	significant weather depiction VT1800
0620	wave analysis 0000
0703	significant wave prognosis VT1200 (H+12)
0722	significant wave prognosis VT0000 (H+24)
0741	isobaric prognosis VT1200 (H+36)
0801	significant wave prognosis VT1200 (H+36)
0820	• sea surface temperatures (Newfoundland Wednesday, Saturday; Nova Scotia Sunday, Thursday) • ocean feature analysis (Newfoundland Monday, Friday; Nova Scotia Tuesday)
0901	surface analysis 0600
1001	850 hPa wind/temperature/height forecast VT1800/0000
1101	ice chart Labrador (if available)
1201	ice chart Newfoundland (if available)
1301	ice chart Gulf of Saint Lawrence (if available)
1401	significant weather depiction VT0000
1501	500 hPa analysis 1200
1522	surface analysis 1200
1601	850 hPa analysis 1200
1701	isobaric prognosis VT1200 (H+24)
1801	significant weather depiction VT0600
1820	wave analysis 1200
1901	isobaric prognosis VT0000 (H+36)
1920	significant wave prognosis VT0000 (H+12)
1939	significant wave prognosis VT1200 (H+24)
2001	significant wave prognosis VT0000 (H+36)
2019	• sea surface temperatures Newfoundland (Monday, Wednesday, Saturday) • Nova Scotia (Tuesday, Thursday, Friday, Sunday)
2101	• ocean feature analysis Newfoundland (Monday, Wednesday, Saturday) • ocean feature analysis Nova Scotia (Tuesday, Thursday, Friday, Sunday)
2123	surface analysis 1800
2201	ice chart Newfoundland (if available)
2301	ice chart Gulf of Saint Lawrence (if available)

CF Victoria, BC	2754.0	CKN
	4268.0	CKN
	6456.0	CKN
	12753.0	CKN

→ 120/576

0245	broadcast schedule
0300	combined 850/500 hPa analysis 0000
0310	0000 surface analysis
0320	weather depiction prognosis VT1200 (H+9)
1025	test chart
1030	0600 surface analysis
1040	wave height prognosis VT0000 (H+18)
1050	wave height prognosis VT1200 (H+30)
1100	weather depiction prognosis VT1800 (H+6)
1110	weather depiction prognosis VT0600 (H+18)
1230	test chart
1235	surface prognosis VT0000 (H+18)
1245	surface prognosis VT1200 (H+30)
1515	test chart
1520	combined 850/500 hPa analysis 1200
1530	1200 surface analysis
2115	test chart
2120	weather depiction prognosis VT0000 (H+6)
2130	weather depiction prognosis VT1200 (H+18)
2140	surface prognosis VT1200 (H+18)
2150	surface prognosis VT0000 (H+30)
2200	1800 surface analysis
2210	wave height prognosis VT1200 (H+18)
2220	wave height prognosis VT0000 (H+30)
2230	• sea surface temperature analysis (Tuesday, Friday) • ocean analysis (Monday, Saturday)
2240	standard chart symbols

CHINA

Beijing Meteo	5526.5	BAF 6
	8122.0	BAF 36
	10117.0	BAF 4
	14367.0	BAF 8
	16026.0	BAF 9
	18237.0	BAF 33

→ 120/576

0008	FXAS BABJ VT1200 500 hPa synoptic trend prognosis for the next dekad (on the 10th, 20th and at the end of each month) FSCI BABJ precipitation VT1200 (H+24, H+36, H+48)
0030	AUAS70 BABJ 1200 retransmission of 2000
0048	AXCI70 BABJ 1200 700 hPa wind speed AXCI BABJ 1200 500/850 hPa Θ_{se} AXCI85 BABJ 1200 850 hPa wind speed AXCI70 BABJ 1200 700 hPa Θ_{se}

0110	AXCI70 BABJ 1200 700 hPa $T - T_d$ AXCI70 BABJ 1200 700 hPa vapour flux divergence AXCI BABJ 1200 500/1000 hPa thickness AXCI85 BABJ 1200 850 hPa temperature
0132	FSXN BABJ pressure VT1200 (H+36)
0154	0000 typhoon warning (in clear English and Chinese) (in case of typhoon)
0216	FSCI BABJ minimum temperature (H+36) (from 01 October to 30 April) FSCI BABJ maximum temperature (H+48) (from 01 May to 30 September)
0238	FSCI BABJ precipitation VT0000 (H+24, H+48) FSCI BABJ minimum temperature (H+60) (from 01 October to 30 April)
0300	satellite picture analysis (from 01 May to 30 September)
0322	USAS85 BABJ 0000 850 hPa plotted data
0344	USAS70 BABJ 0000 700 hPa plotted data
0406	USAS50 BABJ 0000 500 hPa plotted data
0428	FSAS BABJ pressure VT1800 (H+48)
0450	ASAS BABJ 0000 pressure
0512	FUXN BABJ ECMWF 500 hPa VT1200 (H+48) FUXN BABJ ECMWF 500 hPa VT1200 (H+72)
0534	FUXN BABJ ECMWF 500 hPa VT1200 (H+96) FUXN BABJ ECMWF 500 hPa VT1200 (H+120)
0556	AUAS BABJ 0000 500 hPa
0618	AUAS BABJ 0000 700 hPa
0640	AUAS BABJ 0000 850 hPa
0702	radar echo (from 01 June to 30 September)
0724	satellite picture analysis (from 01 May to 30 September)
0746	0600 typhoon warning (in clear English and Chinese) (in case of typhoon)
0808	AUCI BABJ 0000 700 hPa vertical P-velocity AUCI BABJ 0000 500 hPa vorticity FSCI BABJ precipitation VT0000 (H+24) FSCI BABJ precipitation VT0000 (H+12-36)
0830	ASXT BABJ 0000 pressure
0852	FSCI BABJ precipitation (H+24)
0914	radar echo (from 01 June to 30 September)
0936	AUXT BABJ 0000 200 hPa
0958	CUXN BABJ 1200 monthly mean ultra-long wave (8. of each month) FUAS BABJ VT1200 500 hPa height for the next month (24. of each month) CUXN BABJ 1200 500 hPa mean height for the preceding pentad (3., 7., 13., 17., 23., and 27. of each month) CUXN BABJ 1200 retransmission of 1040 (on the 14th of each month)
1020	CUXN BABJ 1200 500 hPa monthly mean spherical harmonic coefficient and mean kinetic energy (7. of each month) CUXN BABJ 1200 500 hPa mean height of the preceding dekad (3., 13., 23. of each month) FXCI BABJ VT1200 precipitation anomaly percentage for the next month (24. of each month)
1030	FUCI BABJ VT1200 mean temperature anomaly for the next month (24. of each month)
1042	CUXN BABJ 1200 500 hPa monthly mean vorticity anomaly (7. of each month) CUXN BABJ 1200 500 hPa mean height of the preceding month (3. of each month) CUXN BABJ 1200 500 hPa monthly mean circulation characteristic value and sea temperature (13. of each month)
1104	CUXN BABJ 500 hPa height anomaly of the preceding month (3. of each month)
1126	FSPW BABJ typhoon track forecast VT0000 (unfixed issue of forecast according to typhoon development)
1148	test chart (Monday)
1158	programme amendments (Monday)
1340	1200 typhoon warning (in clear English and Chinese) (in case of typhoon)
1820	USAS BABJ 1200 850 hPa plotted data
1842	USAS BABJ 1200 700 hPa plotted data
1904	USAS BABJ 1200 500 hPa plotted data
1926	ASXX BABJ 1200 pressure
1948	1800 typhoon warning (in clear English and Chinese) (in case of typhoon)
2010	AUAS BABJ 1200 700 hPa
2028	AUXN BABJ 1200 100 hPa AUXN BABJ 1200 200 hPa
2050	AUXN BABJ 1200 300 hPa AUXN BABJ 1200 500 hPa
2112	AXCI BABJ 1200 500 hPa vorticity AXCI BABJ 1200 700 hPa vapour flux AXCI BABJ 1200 700 hPa vertical P-velocity AXCI BABJ 1200 850 hPa vapour flux
2134	AXXN BABJ 1200 24-hour pressure changes FUXN BABJ 500 hPa VT1200 (H+72)
2156	FUXN BABJ 500 hPa VT1200 (H+48) FUXN BABJ 700 hPa VT1200 (H+36)
2218	FXCI50 BABJ 500 hPa vorticity VT1200 (H+36) FXCI50 BABJ 500 hPa vorticity VT1200 (H+48) FXCI70 BABJ 700 hPa vertical P-velocity VT1200 (H+36) FXCI70 BABJ 700 hPa vertical P-velocity VT1200 (H+48)
2240	FSPW BABJ typhoon track forecast VT1200 (unfixed issue of forecast according to typhoon development)

2302	FXCI70 BABJ 700 hPa vapour flux VT1200 (H+36)
	FXCI70 BABJ 700 hPa vapour flux VT1200 (H+48)
	FXCI85 BABJ 850 hPa vapour flux VT1200 (H+36)
	FXCI70 BABJ 700 hPa vapour flux divergence VT1200 (H+48)
2324	FXCI70 BABJ 700 hPa wind speed VT1200 (H+36)
	FXCI BABJ 500/850 hPa Θ_{se} VT1200 (H+36)
	FXCI85 BABJ 850 hPa wind speed VT1200 (H+36)
	FXCI70 BABJ 700 hPa Θ_{se} VT1200 (H+36)
2346	FXCI BABJ 700 hPa $T - T_d$ VT1200 (H+36)
	FXCI50 BABJ 500 hPa height changes VT1200 (H+12-36)
	FXCI BABJ 500/1000 hPa thickness VT1200 (H+36)
	FXCI85 BABJ 850 hPa temperature VT1200 (H+36)

DENMARK

Copenhagen Meteo	5850.0	OXT
	9360.0	OXT
	13855.0	OXT
	17510.0	OXT

→ 120/576

0003	STGL EKMI ice chart
0028	STGL EKMI ice chart
0943	STGL EKMI ice chart
1008	STGL EKMI ice chart
1153	STGL EKMI ice chart
1218	STGL EKMI ice chart
1243	STGL EKMI ice chart
1308	STGL EKMI ice chart
1333	STGL EKMI ice chart
1803	STGL EKMI ice chart
1828	STGL EKMI ice chart

DIEGO GARCIA

USN Diego Garcia	7582.0	NKW
	12806.0	NKW
	20302.0	NKW

(schedule see under USN Apra Harbour, Guam)

EGYPT

Cairo Meteo	4526.5	SUU
	10123.0	SUU

→ 120/576

0000	0600 surface prognosis
0020	1800 surface analysis
0340	500 hPa prognosis VT1200
0440	significant weather prognosis VT1200
0500	maximum wind / tropopause prognosis VT1200
0600	surface prognosis VT1200
0640	surface prognosis VT0000
0700	0000 analysis 850 hPa
0740	0000 analysis 500 hPa
0900	maximum wind / tropopause prognosis VT0000
0940	500 hPa prognosis VT1800
1040	significant weather prognosis VT1800
1100	maximum wind / tropopause prognosis VT1800
1200	1800 surface prognosis
1220	0600 surface analysis
1240	0000 satellite wind analysis
1540	500 hPa prognosis VT0000
1640	significant weather prognosis VT0000
1700	maximum wind / tropopause prognosis VT0000
1800	surface prognosis VT0000
1840	surface prognosis VT1200
1900	1200 analysis 850 hPa
1940	1200 analysis 500 hPa
2100	maximum wind / tropopause prognosis VT1200
2140	500 hPa prognosis VT0600
2240	significant weather prognosis VT0600
2300	maximum wind / tropopause prognosis VT0600

GERMANY

AirFax

AirFax is a dial-up weatherfax service for pilots that have access to a telefax machine with polling receive mode. The telefax numbers - see *http://www.dwd.de/services/gflf/fww_deutschland.html* - are

- for IFR flights: Berlin 030 69008393; Dresden 0351 75563; Düsseldorf 0211 419515; Düsseldorf (service for balloon and glider flying) 0211 412523; Hamburg 040 50050412 and 040 50054013; Hannover 0511 9735849; Köln 02203 54156; Leipzig 0341 2241866; München 089 9701819 and 089 9702726; Münster 02571 91168; Nürnberg 0911 3650543; Offenbach 069 823453 and 069 823454; Stuttgart 0711 795926;

- for VFR flights: Berlin 030 69008392 and 030 69008394; Bremen 0421 5372174; Dresden 0351 75550; Düsseldorf 0211 4791117; Hamburg 040 50050414; Hannover 0511 9735848; Köln 02203 591549; Leipzig 0341 2241865; München 089 9701818; München (service for balloon flying) 089 9701821; Münster 02571 91251; Nürnberg 0911 3650545; Offenbach 069 821769; Stuttgart 0711 9484384.

MetFax Offenbach

MetFax is a telefax-on-demand meteorological service for the general public. Access numbers are

0190 192500	product list
0190 192501	satellite picture Europe
0190 192504	snow heights of alpine glaciers (April - November)
0190 192505	snow heights Bavarian Alps (December - March)
0190 192506	snow heights Austria (Vorarlberg, Tyrol, Salzburg) (December - March)
0190 192507	snow heights Austria (Carinthia, Styria, Upper and Lower Austria) (December - March)
0190 192508	snow heights Switzerland (December - March)
0190 192509	snow heights Italy (South Tyrol) (December - March)
0190 192510	weather prognosis Germany
0190 192520	weather prognosis for one week Schleswig-Holstein, Hamburg, Lower Saxony, Bremen
0190 192521	weather prognosis for one week Mecklenburg-Vorpommern, Berlin, Brandenburg
0190 192522	weather prognosis for one week Nordrhein-Westfalen
0190 192523	weather prognosis for one week Hessen, Rheinland-Pfalz, Saarland
0190 192524	weather prognosis for one week Saxony, Saxony-Anhalt, Thuringia
0190 192525	weather prognosis for one week Baden-Württemberg
0190 192526	weather prognosis for one week Bavaria
0190 192560	ultraviolet radiation index prognosis Bremen, Hamburg, Niedersachsen, Nordrhein-Westfalen, Schleswig-Holstein
0190 192561	ultraviolet radiation index prognosis Berlin, Brandenburg, Mecklenburg-Vorpommern, Saxony, Saxony-Anhalt, Thuringia
0190 192562	ultraviolet radiation index prognosis Baden, Hessen, Rheinland-Pfalz, Saarland
0190 192563	ultraviolet radiation index prognosis Bavaria, Württemberg
0190 192570	maritime weather North Sea and Baltic Sea

Grengel Meteo	2342.5	DHJ 51
	4570.5	DHJ 51

Officially, there is no longer a fixed schedule for broadcasts of meteorological information to the German Air Force. Specialized products are transmitted according to tactical needs. Since sensitive data may be included in military movement exercise charts that have been transmitted, for decades, *unclassified without any protection against unwanted interception!* -, the station called us on 21 SEP 1995 and requested us not to continue to publish the broadcast schedule and sample fax charts due to tactical reasons. These military people are pretty naïve - according to their logic, a station that is "not listed officially" is perfectly secret ... Anyway, the latest fax schedule is available on the Internet at *http://ourworld.compuserve.com/homepages/HFFAX/DHJ51NEW.TXT*

Hamburg Meteo	3855.0	DDH 3
	7880.0	DDK 3
	13882.5	DDK 6

→ 120/576

0400	PPNA98 EDZW 0000 surface pressure analysis with plotted data
0420	PYMZ98 EDZW 0300 plotted surface data
0534	PPME98 EDZW 0000 surface prognosis (H+24) (EMV) PYMZ95 EDZW 0000 500/1000 hPa plotted data
0545	PHMA50 EDZW 0000 500 hPa analysis with plotted data
0636	PHPE50/PHPI50/PHPK50 EDZW 0000 500 hPa contour lines (gpdam) and isotherms (°C) prognosis (H+24/H+48/H+72) (EM) PHPM50 EDZW 0000 500 hPa contour lines (gpdam) and isotherms (°C) prognosis (H+96) (GM) PPPE98/PPPI98/PPPK98 EDZW 0000 surface MSL pressure (hPa) prognosis (H+24/H+48/H+72) (EM) PPPM98 EDZW 0000 surface MSL pressure (hPa) prognosis (H+96) (GM) PTPE85/PTPI85/PTPK85 EDZW 0000 850 hPa isotherms (°C) prognosis (H+24/H+48/H+72) (EM) PTPM85 EDZW 0000 850 hPa isotherms (°C) prognosis (H+96) (GM) PRPE70/PRPI70/PRPK70 EDZW 0000 700 hPa relative humidity (%) prognosis (H+24/H+48/H+72) (EM) PRPM70 EDZW 0000 700 hPa relative humidity (%) prognosis (H+96) (GM)
0656	PHMC85/PHMG85/PHMJ85 EDZW 0000 850 hPa contour lines (gpdam) and isotherms (°C) prognosis (H+12/H+36/H+60) (EM) PHML85 EDZW 0000 850 hPa contour lines (gpdam) and isotherms (°C) prognosis (H+84) (GM)
0711	PHMA50 EDZW 0000 500 hPa analysis with plotted data

0731 PPME98 EDZW 0000 surface prognosis (H+24) (EMV)
PYMZ95 EDZW 0000 500/1000 hPa plotted data
0745 PPSA98 EDZW 0000 surface pressure analysis, arrows showing the movement of pressure systems, tropical storms, significant weather
0809 PPMG98/PPMI98 EDZW 0000 surface prognosis (H+36/H+48) (EM)
0820 PPMJ98/PPMK98 EDZW 0000 surface prognosis (H+60/H+72) (EM)
0831 PPMG98 EDZW 0000 surface prognosis (H+36/48) (EM)
PWMF98 EDZW 0000 10 m winds prognosis (H+30) (EM)
→ 120/288
0845 PTMA98 EDZW sea surface temperature North Sea
0940 PINA98 EDZW ice conditions chart West Baltic Sea (irregularly), or
PISA98 EDZW ice conditions chart West Atlantic (irregularly)
→ 120/576
1000 PPNA98 EDZW 0600 surface pressure analysis with plotted data
1020 PYMZ98 EDZW 0900 plotted surface data
1040 PZZZ95 EDZW test chart
1050 PZZZ93 EDZW transmission schedule
1320 PYMZ98 EDZW 1200 plotted surface data
1353 PPQA98 EDZW 0000 surface pressure analysis with plotted data
1415 PIOA98 ESWI ice conditions chart Baltic Sea (irregularly)
1520 PJSJ98 EDZW 1200 wave prediction North Atlantic (H+60)
1541 PIPA98 ESWI ice conditions chart Baltic Sea (irregularly)
1600 PPNA98 EDZW 1200 surface pressure analysis with plotted data
1620 PYMZ98 EDZW 1500 plotted surface data
1734 PPME98 EDZW 1200 surface prognosis (H+24) (EMV)
PYMZ95 EDZW 1200 500/1000 hPa plotted data
1745 PHMA50 EDZW 1200 500 hPa analysis with plotted data
1810 PPSA98 EDZW 1200 surface pressure analysis, arrows showing the movement of pressure systems, tropical storms, significant weather
1856 PHMC85/PHMG85/PHMJ85 EDZW 1200 850 hPa contour lines (gpdam) and isotherms (°C) prognosis (H+12/H+36/H+60) (EM)
PHML85 EDZW 1200 850 hPa contour lines (gpdam) and isotherms (°C) prognosis (H+84) (GM)
1920 PYMZ98 EDZW 1800 plotted surface data
1940 PPMF98 EDZW 1200 surface prognosis (H+30) (EM)
PWMF98 EDZW 1200 10 m winds prognosis (H+30) (EM)
2001 PTSA98 EDZW 5-day mean of water temperature (Tuesday and Friday)
2021 PINT21 EGRR sea ice observations
2042 PIOA98 ESWI ice conditions chart Baltic Sea (irregularly)
2126 PINA98 EDZW ice conditions chart West Baltic Sea (irregularly), or
PISA98 EDZW ice conditions chart West Atlantic (irregularly)
2140 PJSJ98 EDZW 1200 wave prediction North Atlantic (H+60)
2201 PPNA98 EDZW 1800 surface pressure analysis with plotted data

GREECE

Athens Meteo	8105.0	SWA 28

(schedule see under Athens R)

Athens R	8530.0	SVJ 4

→ 120/576
0845 FWME VT1200 (H+30)
0855 FWME VT1200 (H+36)
0905 FWME VT1200 (H+12)
0915 FWME VT1200 (H+18)
0925 ASME 0600
0935 FSME VT0600 (H+24)

GUAM

USN Apra Harbour	5258.0	NPN
	10253.0	NPN
	16027.6	NPN
	19858.0	NPN

→ 120/576
0000 locally produced chart West Pacific broadcast schedule
0030 significant wave height prognosis West Pacific VT1200 (H+48)
0045 surface prognosis West Pacific VT1200 (H+48)
0100 850 hPa prognosis West Pacific VT1200 (H+48)
0115 700 hPa prognosis West Pacific VT1200 (H+48)
0130 500 hPa prognosis West Pacific VT1200 (H+48)
0145 surface prognosis West Pacific VT1200 (H+60)
0200 500 hPa prognosis West Pacific VT1200 (H+60)
0215 locally produced chart surface hand prognosis VT1200 (H+60)
0230 locally produced chart 0000 satellite imagery panel A
0245 locally produced chart tropical cyclone warnings

0300	surface prognosis West Pacific VT1200 (H+72)
0315	500 hPa prognosis West Pacific VT1200 (H+72)
0330	surface prognosis West Pacific VT1200 (H+96)
0345	500 hPa prognosis West Pacific VT1200 (H+96)
0400	locally produced chart surface hand prognosis VT1200 (H+96)
0415	surface prognosis West Pacific VT1200 (H+108)
0430	500 hPa prognosis West Pacific VT1200 (H+108)
0445	surface prognosis West Pacific VT1200 (H+120)
0500	500 hPa prognosis West Pacific VT1200 (H+120)
0515	locally produced chart surface hand prognosis VT1200 (H+120)
0530	locally produced chart tropical cyclone warnings
0545	locally produced chart 0300 satellite imagery panel A
0630	0000 surface analysis West Pacific
0645	0000 850 hPa analysis West Pacific
0700	0000 700 hPa analysis West Pacific
0715	0000 500 hPa analysis West Pacific
0730	0000 300 hPa analysis West Pacific
0745	surface prognosis West Pacific VT0000 (H+24)
0800	850 hPa prognosis West Pacific VT0000 (H+24)
0815	700 hPa prognosis West Pacific VT0000 (H+24)
0830	500 hPa prognosis West Pacific VT0000 (H+24)
0845	locally produced chart 0600 satellite imagery panel A
0900	locally produced chart tropical cyclone warnings
0915	surface prognosis West Pacific VT0000 (H+36)
0930	850 hPa prognosis West Pacific VT0000 (H+36)
0945	700 hPa prognosis West Pacific VT0000 (H+36)
1000	500 hPa prognosis West Pacific VT0000 (H+36)
1015	300 hPa prognosis West Pacific VT0000 (H+36)
1030	0000 significant wave height analysis West Pacific
1045	significant wave height prognosis West Pacific VT0000 (H+24)
1100	locally produced chart significant wave height prognosis VT0000 (H+36)
1115	locally produced chart tropical cyclone warnings
1130	locally produced chart 0900 satellite imagery panel A
1145	locally produced chart weather depiction
1200	locally produced chart West Pacific broadcast schedule
1230	significant wave height prognosis West Pacific VT0000 (H+48)
1245	surface prognosis West Pacific VT0000 (H+48)
1300	850 hPa prognosis West Pacific VT0000 (H+48)
1315	700 hPa prognosis West Pacific VT0000 (H+48)
1330	500 hPa prognosis West Pacific VT0000 (H+48)
1345	surface prognosis West Pacific VT0000 (H+60)
1400	500 hPa prognosis West Pacific VT0000 (H+60)
1415	locally produced chart surface hand prognosis VT0000 (H+60)
1430	locally produced chart 1200 satellite imagery panel A
1445	locally produced chart tropical cyclone warnings
1500	surface prognosis West Pacific VT0000 (H+72)
1515	500 hPa prognosis West Pacific VT0000 (H+72)
1530	surface prognosis West Pacific VT0000 (H+96)
1545	500 hPa prognosis West Pacific VT0000 (H+96)
1600	locally produced chart surface hand prognosis VT0000 (H+96)
1615	surface prognosis West Pacific VT0000 (H+108)
1630	500 hPa prognosis West Pacific VT0000 (H+108)
1645	surface prognosis West Pacific VT0000 (H+120)
1700	500 hPa prognosis West Pacific VT0000 (H+120)
1715	locally produced chart surface hand prognosis VT0000 (H+120)
1730	locally produced chart tropical cyclone warnings
1745	locally produced chart 1500 satellite imagery panel A
1830	1200 surface analysis West Pacific
1845	1200 850 hPa analysis West Pacific
1900	1200 700 hPa analysis West Pacific
1915	1200 500 hPa analysis West Pacific
1930	1200 300 hPa analysis West Pacific
1945	surface prognosis West Pacific VT1200 (H+24)
2000	850 hPa prognosis West Pacific VT1200 (H+24)
2015	700 hPa prognosis West Pacific VT1200 (H+24)
2030	500 hPa prognosis West Pacific VT1200 (H+24)
2045	locally produced chart 1800 satellite imagery panel A
2100	locally produced chart tropical cyclone warnings
2115	surface prognosis West Pacific VT1200 (H+36)
2130	850 hPa prognosis West Pacific VT1200 (H+36)
2145	700 hPa prognosis West Pacific VT1200 (H+36)
2200	500 hPa prognosis West Pacific VT1200 (H+36)
2215	300 hPa prognosis West Pacific VT1200 (H+36)

2230	1200 significant wave height analysis West Pacific
2245	significant wave height prognosis West Pacific VT1200 (H+24)
2300	locally produced chart significant wave height prognosis VT1200 (H+36)
2315	locally produced chart tropical cyclone warnings
2330	locally produced chart 2100 satellite imagery panel A
2345	locally produced chart weather depiction

USN Apra Harbour	5262.0	NPN
	10257.0	NPN
	19862.0	NPN
	23008.0	NPN

→ 120/576

0000	locally produced chart Indian Ocean broadcast schedule
0115	surface prognosis Indian Ocean VT1200 (H+36)
0130	850 hPa prognosis Indian Ocean VT1200 (H+36)
0145	700 hPa prognosis Indian Ocean VT1200 (H+36)
0200	500 hPa prognosis Indian Ocean VT1200 (H+36)
0215	300 hPa prognosis Indian Ocean VT1200 (H+36)
0230	locally produced chart surface prognosis VT1200 (H+60)
0245	surface prognosis Arabian Gulf and Red Sea area VT1200 (H+36)
0300	850 hPa prognosis Arabian Gulf and Red Sea area VT1200 (H+36)
0315	500 hPa prognosis Arabian Gulf and Red Sea area VT1200 (H+36)
0330	surface prognosis Indian Ocean VT1200 (H+48)
0345	850 hPa prognosis Indian Ocean VT1200 (H+48)
0400	700 hPa prognosis Indian Ocean VT1200 (H+48)
0415	500 hPa prognosis Indian Ocean VT1200 (H+48)
0430	surface prognosis Arabian Gulf and Red Sea area VT1200 (H+48)
0445	500 hPa prognosis Arabian Gulf and Red Sea area VT1200 (H+48)
0500	surface prognosis Indian Ocean VT1200 (H+72)
0630	0000 surface analysis Indian Ocean
0645	0000 850 hPa analysis Indian Ocean
0700	0000 700 hPa analysis Indian Ocean
0715	0000 500 hPa analysis Indian Ocean
0730	0000 300 hPa analysis Indian Ocean
0745	0000 surface analysis Arabian Gulf and Red Sea area
0800	0000 850 hPa analysis Arabian Gulf and Red Sea area
0815	0000 500 hPa analysis Arabian Gulf and Red Sea area
0830	locally produced chart tropical cyclone warning
0845	surface prognosis Indian Ocean VT0000 (H+24)
0900	850 hPa prognosis Indian Ocean VT0000 (H+24)
0915	700 hPa prognosis Indian Ocean VT0000 (H+24)
0930	500 hPa prognosis Indian Ocean VT0000 (H+24)
0945	300 hPa prognosis Indian Ocean VT0000 (H+24)
1000	surface prognosis Arabian Gulf and Red Sea area VT0000 (H+24)
1015	850 hPa prognosis Arabian Gulf and Red Sea area VT0000 (H+24)
1030	500 hPa prognosis Arabian Gulf and Red Sea area VT0000 (H+24)
1045	seas prognosis VT0000 (H+36)
1200	locally produced chart Indian Ocean broadcast schedule
1315	surface prognosis Indian Ocean VT0000 (H+36)
1330	850 hPa prognosis Indian Ocean VT0000 (H+36)
1345	700 hPa prognosis Indian Ocean VT0000 (H+36)
1400	500 hPa prognosis Indian Ocean VT0000 (H+36)
1415	300 hPa prognosis Indian Ocean VT0000 (H+36)
1430	locally produced chart surface prognosis VT0000 (H+60)
1445	surface prognosis Arabian Gulf and Red Sea area VT0000 (H+36)
1500	850 hPa prognosis Arabian Gulf and Red Sea area VT0000 (H+36)
1515	500 hPa prognosis Arabian Gulf and Red Sea area VT0000 (H+36)
1530	surface prognosis Indian Ocean VT0000 (H+48)
1545	850 hPa prognosis Indian Ocean VT0000 (H+48)
1600	700 hPa prognosis Indian Ocean VT0000 (H+48)
1615	500 hPa prognosis Indian Ocean VT0000 (H+48)
1630	surface prognosis Arabian Gulf and Red Sea area VT0000 (H+48)
1645	500 hPa prognosis Arabian Gulf and Red Sea area VT0000 (H+48)
1700	surface prognosis Indian Ocean VT0000 (H+72)
1830	1200 surface analysis Indian Ocean
1845	1200 850 hPa analysis Indian Ocean
1900	1200 700 hPa analysis Indian Ocean
1915	1200 500 hPa analysis Indian Ocean
1930	1200 300 hPa analysis Indian Ocean
1945	1200 surface analysis Arabian Gulf and Red Sea area
2000	1200 850 hPa analysis Arabian Gulf and Red Sea area
2015	1200 500 hPa analysis Arabian Gulf and Red Sea area
2030	locally produced chart tropical cyclone warning
2045	surface prognosis Indian Ocean VT1200 (H+24)
2100	850 hPa prognosis Indian Ocean VT1200 (H+24)
2115	700 hPa prognosis Indian Ocean VT1200 (H+24)

2130 500 hPa prognosis Indian Ocean VT1200 (H+24)
2145 300 hPa prognosis Indian Ocean VT1200 (H+24)
2200 surface prognosis Arabian Gulf and Red Sea area VT1200 (H+24)
2215 850 hPa prognosis Arabian Gulf and Red Sea area VT1200 (H+24)
2230 500 hPa prognosis Arabian Gulf and Red Sea area VT1200 (H+24)
2245 seas prognosis VT1200 (H+36)

HAWAII

Honolulu Meteo	9982.5	KVM 70
	11090.0	KVM 70
	16135.0	KVM 70
	23331.5	KVM 70

→ 120/576
0005 isobaric surface analysis Pacific
0030 satellite infra-red imagery full disk
0045 satellite visible imagery Northeast Pacific
0105 tropical surface analysis
0128 surface prognosis (H+48)
0150 500 hPa height/vorticity prognosis (H+48)
0212 wind/stream prognosis (H+24)
0236 wind/stream prognosis (H+48)
0533 test - identification - symbols used on surface weather maps
0545 significant cloud features
0605 surface analysis Pacific
0630 satellite infra-red imagery full disk
0645 satellite visible imagery Northeast Pacific
0705 tropical surface analysis
1150 test - identification - schedule
1205 surface analysis Pacific
1230 satellite infra-red imagery full disk
1245 satellite visible imagery Northeast Pacific
1305 tropical surface analysis
1328 surface prognosis (H+48)
1350 500 hPa height/vorticity prognosis (H+48)
1412 ocean winds / wave heights prognosis (H+24)
1428 ocean winds / wave heights prognosis (H+48)
1733 test - identification - symbols used on surface weather maps
1745 significant cloud features
1805 surface analysis Pacific
1830 satellite infra-red imagery full disk
1845 satellite visible imagery Northeast Pacific
1905 tropical surface analysis
1928 sea surface temperature Hawaii - Alaska
1945 sea surface temperature Hawaiian Islands
2350 test - identification - schedule

USN Pearl Harbour	4855.0	NPM
	21785.0	NPM

→ 120/576
0000
- open (Saturday, Wednesday)
- 1200 sea surface temperature analysis Hawaii area (Sunday)
- 1200 sea surface temperature analysis Southwest Pacific (Monday)
- storm track (Tuesday)
- 1200 sea surface temperature analysis South California (Thursday)
- 1200 sonic layer depth West Pacific (Friday)

0015
- open (Saturday, Wednesday)
- 1200 sea surface temperature analysis (North California) (Sunday, Thursday)
- 1200 sea surface temperature analysis Northwest Pacific (Monday)
- 1200 sonic layer depth East Pacific (Friday)

0029 surface prognosis blend (H+36)
0059 significant wave height prognosis East Pacific VT1200 (H+24)
0110 significant wave height prognosis VT1200 (H+36)
0120 significant wave height prognosis East Pacific VT1200 (H+48)
0131 1200 significant wave height analysis Polar region
0142 surface prognosis Polar region VT1200 (H+12)
0153 surface prognosis Polar region VT1200 (H+24)
0204 850 hPa prognosis East Pacific VT1200 (H+24)
0215 700 hPa prognosis East Pacific VT1200 (H+24)
0226 400 hPa prognosis East Pacific VT1200 (H+24)
0237 300 hPa prognosis East Pacific VT1200 (H+24)
0248 significant wave height prognosis West Pacific VT1200 (H+24)
0259 significant wave height prognosis West Pacific VT1200 (H+48)
0310 850 hPa prognosis West Pacific VT1200 (H+24)
0321 700 hPa prognosis West Pacific VT1200 (H+24)
0332 400 hPa prognosis West Pacific VT1200 (H+24)
0343 300 hPa prognosis West Pacific VT1200 (H+24)
0354 significant wave height prognosis Polar region VT1200 (H+24)
0405 significant wave height prognosis Polar region VT1200 (H+48)
0416 500 hPa long wave prognosis Polar region VT1200 (H+24)
0427 500 hPa long wave prognosis Polar region VT1200 (H+48)
0438 tropical warning or open period
0600 FFAX schedule
0630 0000 surface analysis North Pacific
0915 0000 500 hPa analysis East Pacific
0926 0000 500 hPa analysis West Pacific

0937	surface prognosis East Pacific VT0000 (H+24)
0948	surface prognosis West Pacific VT0000 (H+24)
0959	surface prognosis East Pacific VT0000 (H+48)
1010	surface prognosis West Pacific VT0000 (H+48)
1021	surface prognosis East Pacific VT0000 (H+36)
1032	surface prognosis West Pacific VT0000 (H+36)
1043	0000 significant wave height analysis East Pacific
1054	0000 significant wave height analysis West Pacific
1105	500 hPa prognosis East Pacific VT0000 (H+24)
1116	500 hPa prognosis West Pacific VT0000 (H+24)
1127	500 hPa prognosis East Pacific VT0000 (H+48)
1200	500 hPa prognosis West Pacific VT1200 (H+48)
1229	surface prognosis blend (H+36)
1259	significant wave height prognosis East Pacific VT0000 (H+24)
1310	significant wave height prognosis VT0000 (H+36)
1320	significant wave height prognosis East Pacific VT0000 (H+48)
1331	0000 significant wave height analysis Polar region
1342	surface prognosis Polar region VT0000 (H+12)
1353	surface prognosis Polar region VT0000 (H+24)
1404	850 hPa prognosis East Pacific VT0000 (H+24)
1415	700 hPa prognosis East Pacific VT0000 (H+24)
1426	400 hPa prognosis East Pacific VT0000 (H+24)
1437	300 hPa prognosis East Pacific VT0000 (H+24)
1448	significant wave height prognosis West Pacific VT0000 (H+24)
1459	significant wave height prognosis West Pacific VT0000 (H+48)
1510	850 hPa prognosis West Pacific VT0000 (H+24)
1521	700 hPa prognosis West Pacific VT0000 (H+24)
1532	400 hPa prognosis West Pacific VT0000 (H+24)
1543	300 hPa prognosis West Pacific VT0000 (H+24)
1554	significant wave height prognosis Polar region VT0000 (H+24)
1605	significant wave height prognosis Polar region VT0000 (H+48)
1616	surface prognosis East Pacific VT0000 (H+72)
1627	surface prognosis West Pacific VT0000 (H+72)
1638	tropical warning or open period
1830	1200 surface analysis North Pacific
2115	1200 500 hPa analysis East Pacific
2126	1200 500 hPa analysis West Pacific
2137	surface prognosis East Pacific VT1200 (H+24)
2148	surface prognosis West Pacific VT1200 (H+24)
2159	surface prognosis East Pacific VT1200 (H+48)
2210	surface prognosis West Pacific VT1200 (H+48)
2221	surface prognosis East Pacific VT1200 (H+36)
2232	surface prognosis West Pacific VT1200 (H+36)
2243	1200 significant wave height analysis East Pacific
2254	1200 significant wave height analysis West Pacific
2305	500 hPa prognosis East Pacific VT1200 (H+24)
2316	500 hPa prognosis West Pacific VT1200 (H+24)
2327	500 hPa prognosis East Pacific VT1200 (H+48)

ICELAND

USN Keflavik	3820.5	NRK
	9318.0	NRK

(schedule see under USN Norfolk, VA, USA)

ITALY

Rome Meteo	4777.5	IMB 51
	8146.6	IMB 55
	13597.4	IMB 56

→ 120/576

0055	FUEU20 EDZW VT1200 FL390 FUEU30 EDZW VT1200 FL300
0117	FUEU25 EDZW VT1200 FL340
0129	FUEU40 EDZW VT1200 FL240 FUEU50 EDZW VT1200 FL180
0151	FUEU70 EDZW VT1200 FL100 FUEU30 EDZW VT1200 FL50
0248	FBEU EDZW VT1200 tropopause, maximum wind FL 100-450
0345	FUXX LIIB VT1200 significant weather, tropopause, maximum wind FL 100-450 (replacing 0248 chart when missing)
0400	• APEU LIIB 0000 3-hour pressure changes chart • AUEU LIIB 0000 500 hPa
0415	ASEU LIIB 0000 (summer time only)
0425	AXEU LIIB 0000 freezing level chart AUEU LIIB 0000 850 hPa
0437	ASIY LIIB 0300
0457	ASEU LIIB 0000 (replacing 0415 chart when summer time is over)
0510	AUEU LIIB 0000 700 hPa AUEU LIIB 0000 300 hPa

0522 • AUEU LIIB 0000 200 hPa
• AUEU LIIB 0000
tropopause and maximum wind
0535 FUIY LIIB VT1200
significant weather at low level
0655 FUEU20 EDZW VT1800 FL390
FUEU30 EDZW VT1800 FL300
0717 FUEU25 EDZW VT1800 FL340
0729 FUEU40 EDZW VT1800 FL240
FUEU50 EDZW VT1800 FL180
0751 FUEU70 EDZW VT1800 FL100
FUEU30 EDZW VT1800 FL50
0813 test chart
0848 FBEU EDZW VT1800
tropopause, maximum wind FL 100-450
0859 FUEU LIIB 500 hPa VT0000 (H+48)
0906 FUEU LIIB 500 hPa VT0000 (H+72)
0913 FUEU LIIB 500 hPa VT0000 (H+96)
0920 FUEU LIIB 500 hPa VT0000 (H+120)
0927 FUEU LIIB 500 hPa VT0000 (H+144)
1000 FUXX LIIB VT1800 significant weather,
tropopause, maximum wind FL 100-450
(replacing 0848 chart when missing)
1030 • FSEU LIIB VT0600 (H+24)
• APEU LIIB 0600
3-hour pressure changes chart
1045 ASEU LIIB 0600
1140 FUIY LIIB VT1800
significant weather at low level
1153 FSXX LIIB VT0000
state of Mediterranean Sea
1200 ASIY LIIB 0900
1255 FUEU20 EDZW VT0000 FL390
FUEU30 EDZW VT0000 FL300
1317 FUEU25 EDZW VT0000 FL340
1329 FUEU40 EDZW VT0000 FL240
FUEU50 EDZW VT0000 FL180
1351 FUEU70 EDZW VT0000 FL100
FUEU30 EDZW VT0000 FL50
1448 FBEU EDZW VT0000
tropopause, maximum wind FL 100-450
1555 FUXX LIIB VT0000 significant weather,
tropopause, maximum wind FL 100-450
(replacing 1448 chart when missing)
1610 ASIY LIIB 1500
1630 FUIY LIIB VT0000
significant weather at low level
1645 ASEU LIIB 1200
1700 • APEU LIIB 1200
3-hour pressure changes chart
• AUEU LIIB 1200 500 hPa
1715 AUEU LIIB 1200 300 hPa
AUEU LIIB 1200 500 hPa
1730 • AUEU LIIB 1200 200 hPa
• AUEU LIIB 1200
tropopause and maximum wind
1810 AXEU LIIB 1200 freezing level chart
AUEU LIIB 1200 850 hPa
1855 FUEU20 EDZW VT0600 FL390
FUEU30 EDZW VT0600 FL300
1917 FUEU25 EDZW VT0600 FL340
1929 FUEU40 EDZW VT0600 FL240
FUEU50 EDZW VT0600 FL180
1951 FUEU70 EDZW VT0600 FL100
FUEU30 EDZW VT0600 FL50
2200 test chart
2230 FSXX LIIB VT1200
state of Mediterranean Sea
2240 FUIY LIIB VT0600
significant weather at low level
2252 ASIY LIIB 2100
2312 ASEU LIIB 1800
2322 • FSEU LIIB VT1800 (H+24)
• APEU LIIB 1800
3-hour pressure changes chart
2335 FUXX LIIB VT0600 significant weather,
tropopause, maximum wind FL 100-450
(replacing 2048 chart when missing)

JAPAN

KYODO Tokyo	4316.0	JJC
	8467.5	JJC
	12745.5	JJC
	16971.0	JJC
	17069.5	JJC
	22542.0	JJC

→ 60/576
0145 sports news
→ 120/576
0200 • ocean information
(4th, 14th, 24th of each month)
• epidemic information (Sunday)
• Tokyo Bay cross road information
(Tuesday)
→ 60/576
0245 • morning news
• sports news
• Tokyo Bay cross road information
(Tuesday)
→ 120/576
0430 • news
• ocean information
(4th, 14th, 24th of each month)
• sea surface temperature
(Sunday, Monday)
• Tokyo Bay cross road information
(Tuesday)
→ 60/576
0450 English news
→ 120/576
0540 • satellite fishery information
(Tuesday, Friday)
• oceanographic information
(Saturday, Sunday)
0610 • wave analysis
• Tokyo Bay cross road information
(Tuesday)
→ 60/576
0650 • weather chart (Monday - Saturday)
• weather chart and fishing information
0705 background stories and life information
0745 • evening news and Kaiun-Suisan news
(Monday - Saturday)
• epidemic information (Saturday)
• Sumou match (seasonal)
• morning news and sports news
(public holiday)
1035 wave analysis
North Pacific and China Sea
1100 • news
• Sumou match (seasonal)

1130	English news (Monday)
1305	background stories and life information
1415	Kaiun-Suisan news (Monday - Friday)
1445	baseball sports news (seasonal)
1500	morning news and sports news
1645	• Sunday news (Monday) • evening news (Tuesday - Sunday)
1810	English news (Tuesday)
1930	• Sunday news (Monday) • evening news (Tuesday - Sunday)
2030	news (day after public holiday)
2215	morning news and sports news (Monday and day after public holiday)

Tokyo Meteo	3365.0	JMJ
	5405.0	JMJ 2
	9438.0	JMJ 3
	14692.5	JMJ 4
	18441.2	JMJ 5

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0013	FUXX RJTD 1200 FL390 wind, temperature (H+24)
0032	FUXX RJTD 1200 FL300 wind, temperature (H+24)
0051	FXAS502 RJTD 1200 500 hPa height, vorticity (H+24)
0110	FXAS782 RJTD 1200 850 hPa temperature, wind / 700 hPa vertical P-velocity (H+24)
0129	FSAS02 RJTD 1200 surface pressure, precipitation (H+24)
0148	MANAM manual amendments (issued only when necessary)
0200	test chart
0223	FBAS RJTD 1200 retransmission of 2052
0735	AUPA25 RJTD 0000 250 hPa height, temperature, wind
0754	AUPA20 RJTD 0000 200 hPa height, temperature, wind
0814	FUPA502 RJTD 0000 500 hPa height, temperature, wind (H+24)
0833	FUPA252 RJTD 0000 250 hPa height, temperature, wind (H+24)
0852	FBAS RJTD 0000 significant weather (H+24)
0911	FBPN RJTD 0000 significant weather (H+24)
1000	FUXX RJTD 0000 FL340 wind, temperature (H+24)
1019	FUXX RJTD 0000 FL390 wind, temperature (H+24)
1038	FUXX RJTD 0000 FL300 wind, temperature (H+24)
1057	FUXX RJTD 0000 FL340 wind, temperature (H+24)
1116	FUXX RJTD 0000 FL390 wind, temperature (H+24)
1135	FUXX RJTD 0000 FL300 wind, temperature (H+24)
1154	FUXX RJTD 0000 FL340 wind, temperature (H+24)
1214	FUXX RJTD 0000 FL390 wind, temperature (H+24)
1232	FUXX RJTD 0000 FL300 wind, temperature (H+24)
1251	FXAS502 RJTD 0000 500 hPa height, vorticity (H+24)
1310	FXAS782 RJTD 0000 850 hPa temperature, wind / 700 hPa vertical P-velocity (H+24)
1329	FSAS02 RJTD 0000 surface pressure, precipitation (H+24)
1935	AUPA25 RJTD 1200 250 hPa height, temperature, wind
1954	AUPA20 RJTD 1200 200 hPa height, temperature, wind
2014	FUPA502 RJTD 1200 500 hPa height, temperature, wind (H+24)
2033	FUPA252 RJTD 1200 250 hPa height, temperature, wind (H+24)
2052	FBAS RJTD 1200 significant weather (H+24)
2111	FBPN RJTD 1200 significant weather (H+24)
2200	FUXX RJTD 1200 FL340 wind, temperature (H+24)
2219	FUXX RJTD 1200 FL390 wind, temperature (H+24)
2238	FUXX RJTD 1200 FL300 wind, temperature (H+24)
2257	FUXX RJTD 1200 FL340 wind, temperature (H+24)
2316	FUXX RJTD 1200 FL390 wind, temperature (H+24)
2335	FUXX RJTD 1200 FL300 wind, temperature (H+24)
2354	FUXX RJTD 1200 FL340 wind, temperature (H+24)

Tokyo Meteo	3622.5	JMH
	7305.0	JMH 2
	9970.0	JMH 3
	13597.0	JMH 4
	18220.0	JMH 5
	23522.9	JMH 6

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0000	FSAS07 RJTD 1200 surface pressure, precipitation (H+72)
0020	FSAS09 RJTD 1200 surface pressure, precipitation (H+96)
0040	FSAS12 RJTD 1200 surface pressure, precipitation (H+120)
0103	test chart
0110	0000 meteorological satellite picture (GMS)
0129	radio prediction (20. and 21. of each month)
0140	STPN RJTD retransmission of 1100 FIOH04/16 RJTD retransmission of 1100
0153	WTFE04 RJTD 0000 tropical cyclone forecast (in case of tropical cyclone)
0204	FOPN1 RJTD retransmission of 1111 COPN RJTD retransmission of 1111 SOPQ RJTD retransmission of 1111 SOPN RJTD retransmission of 1111 COPA RJTD retransmission of 1111
0223	FOPN2 RJTD retransmission of 1130 COPQ2 RJTD retransmission of 1130
0240	MANAM manual amendments
0320	ASAS RJTD 0000

0350 AUAS70 RJTD 0000 700 hPa height, temperature, dew point depression
0410 ASAS RJTD 0000 retransmission of 0320
0429 WTFE02 RJTD 0300 tropical cyclone forecast (in case of tropical cyclone)
0440 AWPN RJTD 0000
0459 AUAS50 RJTD 0000 500 hPa height, temperature
0518 AUAS85 RJTD 0000 850 hPa height, temperature, dew point depression
0537 AWJP RJTD 0000
0556 AUFE50 RJTD 0000 500 hPa height, vorticity
AXFE78 RJTD 0000 850 hPa temperature / 700 hPa vertical P-velocity
0607 FUFE502 RJTD 0000 500 hPa height, vorticity (H+24)
FSFE02 RJTD 0000 surface pressure, precipitation (H+24)
0618 FXFE572 RJTD 0000 500 hPa temperature / 700 hPa dew point depression (H+24)
FXFE782 RJTD 0000 850 hPa temperature, wind / 700 hPa vertical P-velocity (H+24)
0629 FUFE503 RJTD 0000 500 hPa height, vorticity (H+36)
FSFE03 RJTD 0000 surface pressure, precipitation (H+36)
0640 FSAS RJTD VT0000 (H+24)
0659 FXFE573 RJTD 0000 500 hPa temperature / 700 hPa dew point depression (H+36)
FXFE783 RJTD 0000 850 hPa temperature, wind / 700 hPa vertical P-velocity (H+36)
0710 0600 meteorological satellite picture (GMS)
0729 FWPN RJTD 0000 wave prognosis (H+24)
0753 WTFE04 RJTD 0600 tropical cyclone forecast (in case of tropical cyclone)
0804 FWJP RJTD 0000 wave prognosis (H+24)
0823 FSAS04 RJTD 0000 surface pressure, precipitation (H+48)
0842 FXAS504 RJTD 0000 500 hPa height, vorticity (H+48)
0920 ASAS RJTD 0600 with plotted data
0950 FSAS07 RJTD 0000 surface pressure, precipitation (H+72)
1010 ASAS RJTD 0600 retransmission of 0920
1029 WTFE02 RJTD 0900 tropical cyclone forecast (in case of tropical cyclone)
1040 FXAS507 RJTD 0000 500 hPa height, vorticity (H+72)
1109 STPN RJTD sea ice condition (seasonal) (Tuesday, Friday)
FIOH04/16 RJTD sea ice condition prognosis (H+48, H+168) (seasonal) (Wednesday, Saturday)
1111 FOPN1 RJTD 10-day mean sea surface temperature and current prognosis (9., 19. and 29. of each month)
COPQ1 RJTD 10-day sea surface temperature (2., 12. and 22. of each month)
SOPQ RJTD sea surface current (6., 10., 16., 20., 26. and 30. of each month)
SOPN RJTD subsurface temperature at the depth of 100 m (7., 17. and 27. of each month)
COPA RJTD 10-day sea surface temperature anomaly (4., 14. and 24. of each month)
1130 FOPN2 RJTD 10-day sea surface temperature anomaly prognosis (9., 19. and 29. of each month)
COPQ2 RJTD 10-day sea surface temperature anomaly (2., 12. and 22. of each month)
1200 FUXT852 RJTD 850 hPa stream lines prognosis VT1000 (H+24)
FUXT854 RJTD 850 hPa stream lines prognosis VT0000 (H+48)
1220 AUXT85 RJTD 0000 850 hPa stream lines
AUXT20 RJTD 0000 200 hPa stream lines
1240 FUXT202 RJTD 0000 200 hPa stream lines prognosis (H+24)
FUXT204 RJTD 0000 200 hPa stream lines prognosis (H+48)
1303 test chart
1310 1200 meteorological satellite picture (GMS)
1353 WTFE04 RJTD 1200 tropical cyclone forecast (in case of tropical cyclone)
1520 ASAS RJTD 1200 with plotted data
1550 AUAS70 RJTD 1200 700 hPa height, temperature, dew point depression
1610 ASAS RJTD 1200 retransmission of 1520
1629 WTFE02 RJTD 1500 tropical cyclone forecast (in case of tropical cyclone)
1640 AUAS50 RJTD 1200 500 hPa height, temperature
1700 AUAS85 RJTD 1200 850 hPa height, temperature, dew point depression
1720 AUFE50 RJTD 1200 500 hPa height, vorticity
AXFE78 RJTD 1200 850 hPa temperature / 700 hPa vertical P-velocity
1731 FUFE502 RJTD 1200 500 hPa height, vorticity prognosis (H+24)
FSFE02 RJTD 1200 surface pressure, precipitation prognosis (H+24)
1742 FXFE572 RJTD 1200 500 hPa temperature, wind / 700 hPa dew point depression prognosis (H+24)
FXFE782 RJTD 1200 850 hPa temperature, wind / 700 hPa vertical P-velocity prognosis (H+24)
1753 FUFE503 RJTD 1200 500 hPa height, vorticity prognosis (H+36)
FSFE03 RJTD 1200 surface pressure, precipitation prognosis (H+36)
1804 FXFE573 RJTD 1200 500 hPa temperature / 700 hPa dew point depression prognosis (H+36)
FXFE783 RJTD 1200 850 hPa temperature, wind / 700 hPa vertical P-velocity prognosis (H+36)

1910	1800 meteorological satellite picture (GMS)
1930	AWJP RJTD 1200 (in case of tropical cyclone)
1953	WTFE04 RJTD 1800 tropical cyclone forecast (in case of tropical cyclone)
2004	FSAS04 RJTD 1200 surface pressure, precipitation prognosis (H + 48)
2023	FXAS504 RJTD 1200 500 hPa height, vorticity prognosis (H + 48)
2042	FXAS784 RJTD 1200 850 hPa temperature, wind / 700 hPa vertical P-velocity prognosis (H + 48)
2101	FWJP RJTD 1200 wave prognosis (H + 24) (in case of tropical cyclone)
2120	ASAS RJTD 1800
2150	FXAS507 RJTD 1200 500 hPa height, vorticity prognosis (H + 72)
2210	ASAS RJTD 1800 retransmission of 2120
2229	WTFE02 RJTD 2100 tropical cyclone forecast (in case of tropical cyclone)
2240	FXAS787 RJTD 1200 850 hPa temperature, wind / 700 hPa vertical P-velocity prognosis (H + 72)
2300	FUXT852 RJTD 850 hPa stream lines prognosis VT1200 (H + 24) FUXT854 RJTD 850 hPa stream lines prognosis VT1200 (H + 48)
2320	AUXT85 RJTD 1200 850 hPa stream lines AUXT20 RJTD 1200 200 hPa stream lines
2340	FUXT202 RJTD 1200 200 hPa stream lines prognosis (H + 24) FUXT204 RJTD 1200 200 hPa stream lines prognosis (H + 48)

USN Totsuka	4967.0	NDT
	12777.0	NDT

(schedule see under USN Apra Harbour, Guam)

KENYA

Nairobi Meteo	7465.0	5YE
	9045.0	5YE
	12317.0	5YE
	16187.0	5YE
	17445.5	5YE

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0010	FBKN HKNC 1200 FL250 significant weather
0350	test chart
0400	FBKN HKNC 1800 FL250 significant weather (segment)
0540	FBKN HKNC 1800 FL 100-250 significant weather
0600	FBKN HKNC 1800 FL250 significant weather
0830	test chart
0844	FUKN HKNC 0000 500 hPa (H + 24)
0903	FUKN HKNC 0000 300 hPa (H + 24)
0922	FUKN HKNC 0000 250 hPa (H + 24)
0941	FUKN HKNC 0000 200 hPa (H + 24)
1000	FBKN HKNC 0000 FL250 significant weather (segment)
1017	FBKN HKNC 0000 FL 100-250 significant weather
1037	FBKN HKNC 0000 FL250 significant weather
1057	ASKN HKNC 0600
1112	AUKN HKNC 0600
1127	ASKN HKNC 0600 24-hour change of pressure
1142	FSKN HKNC 0600 (H + 24)
1210	AUKN HKNC 0600 700 hPa
1229	AUKN HKNC 0600 500 hPa
1248	AUKN HKNC 0600 300 hPa
1307	AUKN HKNC 0600 250 hPa
1326	AUKN HKNC 0600 200 hPa
1345	ASKN HKNC 0600 Indian Ocean
1430	AUKN HKNC 1200 low level convergence zones
1455	ASKN HKNC 1200 24-hour change of pressure
1600	FBKN HKNC 0600 FL250 significant weather (segment)
1638	ASKN HKNC 1200
1653	AUKN HKNC 1200 850 hPa
1708	ASKN HKNC 1200 Indian Ocean
1722	FBKN HKNC 0600 FL 100-250 significant weather
1742	FBKN HKNC 0600 FL250 significant weather
1802	FSKN HKNC 1200 (H + 24)
1820	AUKN HKNC 1200 700 hPa
1839	AUKN HKNC 1200 500 hPa
1858	AUKN HKNC 1200 300 hPa
1917	AUKN HKNC 1200 250 hPa
1936	AUKN HKNC 1200 200 hPa
2055	FUKN HKNC 1200 500 hPa (H + 24)
2114	FUKN HKNC 1200 300 hPa (H + 24)
2133	FUKN HKNC 1200 250 hPa (H + 24)
2152	FUKN HKNC 1200 200 hPa (H + 24)
2210	FBKN HKNC 1200 FL250 significant weather (segment)
2350	FBKN HKNC 1200 FL 100-250 significant weather

KOREA (REPUBLIC OF)

Soul Meteo	5857.5	HLL 8
	7433.5	HLL 5

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0000	ASAS RKSL 2100
0300	ASAS RKSL 0000
0320	monthly forecast (on first and last day of each month)
0350	manual amendments
0500	weekly forecast
0540	AUAS RKSL 0000 850 hPa
0600	ASAS RKSL 0300
0640	AUAS RKSL 0000 500 hPa
0730	FSAS RKSL VT0000
0900	ASAS RKSL 0600
1200	ASAS RKSL 0900

1500	ASAS RKSL 1200
1840	AUAS RKSL 1200 500 hPa
1930	FSAS RKSL VT1200
2100	ASAS RKSL 1800
2300	ASAS RKSL 1800 (retransmission)

NEW ZEALAND

Auckland Meteo	5807.0	ZKLF
	9459.0	ZKLF
	13550.0	ZKLF
	16340.1	ZKLF

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0000	FBPS NZKL VT1200 aviation significant weather
0100	FUPS NZKL 700 hPa VT1800 (H+30)
0115	FUPS NZKL 500 hPa VT1800 (H+30)
0130	FUPS NZKL 250 hPa VT1800 (H+30)
0145	FBPN NZKL VT1200 aviation significant weather
0300	ASNZ NZKL 0000 Tasman Sea
0315	ASPS NZKL 0000
0400	FBAS NZKL VT1200 aviation significant weather
0430	FBPS NZKL VT1200 marine significant weather
0445	FAX schedule
0600	FXNZ NZKL sea/swell forecast VT0600/0000
0615	FBPS NZKL VT1800 aviation significant weather
0715	FUPS NZKL 250 hPa VT1800 (H+18)
0730	FUPS NZKL 700 hPa VT0000 (H+24)
0745	FUPS NZKL 500 hPa VT0000 (H+24)
0800	ASNZ NZKL 0600 Tasman Sea
0815	FBPN NZKL VT1800 aviation significant weather
1030	ASPS AMMC 0000
1115	FUPS NZKL 250 hPa VT0000 (H+24)
1130	FBPS NZKL VT1800 marine significant weather
1145	FBAS NZKL VT1800 aviation significant weather
1200	FBPS NZKL VT0000 aviation significant weather
1400	FUPS NZKL 700 hPa VT0600 (H+30)
1415	FUPS NZKL 500 hPa VT0600 (H+30)
1430	FUPN NZKL 250 hPa VT0600 (H+30)
1445	FBPN NZKL VT0000 aviation significant weather
1500	ASNZ NZKL 1200 Tasman Sea
1515	ASPS NZKL 1200
1600	FSPS NZKL VT1200 (H+30)
1615	FBAS NZKL VT0000 aviation significant weather
1630	FBPS NZKL VT0000 marine significant weather
1645	FAX schedule
1745	FXNZ NZKL sea/swell forecast VT1800/1200
1900	FBPS NZKL VT0600 aviation significant weather
2000	ASNZ NZKL 1800 Tasman Sea
2015	FUPS NZKL 250 hPa VT0600 (H+18)
2030	FUPS NZKL 700 hPa VT1200 (H+24)
2045	FUPS NZKL 500 hPa VT1200 (H+24)
2100	FBPN NZKL VT0600 aviation significant weather
2200	FBAS NZKL VT0600 aviation significant weather
2215	FUPS NZKL 250 hPa VT1200 (H+24)
2300	ASPS AMMC 1200
2315	FUPN NZKL 250 hPa VT1200 (H+24)
2330	FBPS NZKL VT1800 marine significant weather
2345	FSPS NZKL VT0000 (H+30)

REUNION

Saint Denis Meteo	8176.0	FZR 81

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0430	test chart
0433	850-700 hPa winds prognosis (H+12) South Indian Ocean
0445	500-200 hPa winds prognosis (H+12) South Indian Ocean
0457	850-200 hPa vertical shearing prognosis (H+12) South Indian Ocean
0509	850 hPa vorticity-divergence prognosis (H+12) South Indian Ocean
0521	200 hPa vorticity-divergence prognosis (H+12) South Indian Ocean
0533	steering current analysis / prognosis (H+12) South Indian Ocean
0545	steering current prognosis (H+24/H+48) South Indian Ocean
0730	test chart
0733	0000 MSL analysis
0744	significant weather prognosis VT0900
0755	surface pressure prognosis (H+24/H+48) South Indian Ocean
0807	850-700 hPa winds prognosis (H+24) South Indian Ocean
0819	500-200 hPa winds prognosis (H+24) South Indian Ocean
0831	300-250 hPa winds prognosis (H+24) South Indian Ocean
0843	850-200 hPa vertical shearing prognosis (H+24/H+48) South Indian Ocean
0855	850-700 hPa winds prognosis (H+48) South Indian Ocean
0907	500-200 hPa winds prognosis (H+48) South Indian Ocean
0919	observed and forecast tropical cyclone track (when tropical cyclone in area)
1030	test chart and facsimile programme
1041	850 hPa vorticity-divergence prognosis (H+24) South Indian Ocean
1053	200 hPa vorticity-divergence prognosis (H+24) South Indian Ocean
1105	0600 MSL analysis
1116	850 hPa vorticity-divergence prognosis (H+48) South Indian Ocean
1128	200 hPa vorticity-divergence prognosis (H+48) South Indian Ocean
1140	surface winds analysis / prognosis (H+12) South Indian Ocean

1152 surface winds analysis / prognosis (H+24/H+48) South Indian Ocean

RUSSIAN FEDERATION

Moscow Meteo	53.6	RTO
	3875.0	RCI 72
	5150.0	RVO 73
	7670.0	RCC 76
	10980.0	RDD 79
	15950.0	RBI 77

→ 120/576
0003 PGQD91 RUMS significant weather chart and prognosis below 400 hPa VT1200 (H+18)
0016 PHMD40 RUMS 400 hPa VT1200 (H+18)
0029 PWRF20 RUMS 200 hPa VT1200 (H+30)
0044 PWRF25 RUMS 250 hPa VT1200 (H+30)
0059 PWRF30 RUMS 300 hPa VT1200 (H+30)
0114 PGRF93 RUMS significant weather chart VT1200 (H+30)
0129 PHNA50 RUMS 1200 500 hPa
0151 PHNA30 RUMS 1200 300 hPa
→ 90/576
0215 PYUA98 RUMS 0000 surface analysis
→ 120/576
0245 PYUA97 RUMS 0000 tropopause
→ 90/576
0307 PYUA85 RUMS 0000 850 hPa
0337 PYUA50 RUMS 0000 500 hPa
0407 PDUA93 RUMS 0000 thickness 500/1000 hPa
0437 QPPA98 RUMS 0300 surface analysis
0513 PYUA40 RUMS 0000 400 hPa
→ 120/288
0543 PPUE98 RUMS VT0000 (H+24)
0555 PHUG70 RUMS 700 hPa VT0000 (H+24/H+36)
0607 PHUG50 RUMS 500 hPa VT0000 (H+24/H+36)
→ 120/576
0619 PGMC93 RUMS significant weather chart and prognosis above 400 hPa VT0000 (H+12)
0631 PHMC30 RUMS 300 hPa VT0000 (H+12)
0644 PBME91 RUMS nephanalysis and forecast of cloud systems VT0000 (H+24)
0704 PWUA96 RUMS 0000 maximum wind
0726 PGQC91 RUMS significant weather chart and prognosis below 400 hPa VT0000 (H+12)
0739 PHMC40 RUMS 400 hPa VT0000 (H+12)
→ 90/576
0752 PPNA98 RUMS 0000 surface analysis
0822 PYUA98 RUMS 0600 surface analysis
0852 PYUA20 RUMS 0000 200 hPa
→ 120/288
0922 PHUG85 RUMS 850 hPa VT0000 (H+24/H+36)
0934 PPUG98 RUMS VT0000 (H+36)
→ 90/576
0946 PHXQ50 RUMS 1200 1000/500 hPa
1013 PHXQ51 RUMS VT1200 (H+48/H+72/H+96/H+120/H+144)
1040 QPPA98 RUMS 0900 surface analysis
→ 120/576
1140 PWRE20 RUMS 200 hPa VT0000 (H+24)
1155 PWRE25 RUMS 250 hPa VT0000 (H+24)
1210 PWRE30 RUMS 300 hPa VT0000 (H+24)
1225 PGRE93 RUMS significant weather chart VT0000 (H+24)
1240 PGMD93 RUMS significant weather chart and prognosis above 400 hPa VT0000 (H+18)
1253 PHMD30 RUMS 300 hPa VT0000 (H+18)
1306 PGQD91 RUMS significant weather chart and prognosis below 400 hPa VT0000 (H+18)
1320 PHMD40 RUMS 400 hPa VT0000 (H+18)
1333 PHMD30 RUMS 0000 300 hPa
1355 PHMD50 RUMS 0000 500 hPa
→ 90/576
1417 PYUA98 RUMS 1200 surface analysis
→ 120/576
1447 PYUA97 RUMS 1200 tropopause
→ 90/576
1509 PYUA85 RUMS 1200 850 hPa
1539 PYUA50 RUMS 1200 500 hPa
1609 PDUA93 RUMS 1200 thickness 500/1000 hPa
1639 QPPA98 RUMS 1500 surface analysis
1715 PYUA40 RUMS 1200 400 hPa
→ 120/576
1745 PBME91 RUMS nephanalysis and forecast of cloud systems VT1200 (H+24)
→ 120/288
1805 PPUE98 RUMS VT1200 (H+24)
→ 120/576
1817 PWRF20 RUMS 200 hPa VT0000 (H+30)
1832 PWRF25 RUMS 250 hPa VT0000 (H+30)
1847 PWRF30 RUMS 300 hPa VT0000 (H+30)
1902 PGRF93 RUMS significant weather chart VT0000 (H+30)
1917 PGMC93 RUMS significant weather chart and prognosis above 400 hPa VT1200 (H+12)
1930 PHMC30 RUMS 300 hPa VT1200 (H+12)
1943 PGQC91 RUMS significant weather chart and prognosis below 400 hPa VT1200 (H+12)
1956 PHMC40 RUMS 400 hPa VT1200 (H+12)
2009 PWUA96 RUMS 1200 maximum wind

→ 90/576
2031 PPUA98 RUMS 1800 surface analysis
2101 PPNA98 RUMS 1200 surface analysis
2131 PYUA20 RUMS 1200 200 hPa
→ 120/576
2201 PWRE20 RUMS 200 hPa VT1200 (H+24)
2216 PWRE25 RUMS 250 hPa VT1200 (H+24)
2231 PWRE30 RUMS 300 hPa VT1200 (H+24)
→ 90/576
2246 QPPA98 RUMS 2100 surface analysis
→ 120/576
2322 PGRE93 RUMS significant weather chart VT1200 (H+24)
2337 PGMD93 RUMS significant weather chart and prognosis above 400 hPa VT1200 (H+18)
2350 PHMD30 RUMS 300 hPa VT1200 (H+18)

SENEGAL

Dakar Meteo 13666.0 6VU 73
19751.5 6VU 79

→ 60/576
0100 FBAO GOOY VT1200
→ 120/576
0340 test chart
0400 ASAO GOOY 0000
0445 AUAO GOOY 0000 850 hPa
0500 AUAO GOOY 0000 700 hPa
0515 AUAO GOOY 0000 300 hPa
0530 AUAO GOOY 0000 250 hPa
→ 60/576
0545 FBAO GOOY VT1800
→ 120/576
0615 AUAO GOOY 0000 200 hPa
0630 AUAO GOOY 0000 500 hPa
→ 60/576
0700 FBAO GOOY VT1800
→ 120/576
0740 test chart
0820 FUAU GOOY VT0000 FL180
0840 FUAU GOOY VT0000 FL300
0900 FUAU GOOY VT0000 FL340
0920 FUAU GOOY VT0000 FL390
0940 test chart
1000 ASAO GOOY 0600
1040 test chart
→ 60/576
1145 FBAO GOOY VT0000
→ 120/576
1240 test chart
→ 60/576
1300 FBAO GOOY VT0000
→ 120/576
1540 test chart
1600 ASAO GOOY 1200
1645 AUAO GOOY 1200 850 hPa
1700 AUAO GOOY 1200 700 hPa
1715 AUAO GOOY 1200 300 hPa
1730 AUAO GOOY 1200 250 hPa
→ 60/576
1745 FBAO GOOY VT0600
→ 120/576
1815 AUAO GOOY 1200 200 hPa
1830 AUAO GOOY 1200 500 hPa
→ 60/576
1900 FBAO GOOY VT0600
→ 120/576
1940 test chart
2020 FUAU GOOY VT1200 FL180
2040 FUAU GOOY VT1200 FL300
2100 FUAU GOOY VT1200 FL340
2120 FUAU GOOY VT1200 FL390
2140 test chart
2200 ASAO GOOY 1800
2240 test chart
→ 60/576
2345 FBAO GOOY VT1200

SINGAPORE

KYODO Singapore 16035.0 9VF 252
17430.0 9VF 209

(schedule see under KYODO Tokyo, Japan)

SOUTH AFRICA (REPUBLIC OF)

Pretoria Meteo 4014.0 ZRO 1
7508.0 ZRO 2
13538.0 ZRO 3
18238.0 ZRO 4

→ 120/576
0405 FSZA FAPR ECMWF VT1200
0445 ASZA FAPR 0000 for shipping
0505 XXZA FAPR facsimile programme
0630 FUZA FAPR ECMWF VT1200
0710 AOZA FAPR 10-day mean sea surface temperature (Eastern coastal waters Monday, Wednesday, Friday; Western coastal waters Tuesday, Thursday, Saturday)
0730 FSZA FAPR ECMWF VT1200
0800 XXZA FAPR Antarctic ice limits
1000 ASZA FAPR 0600 for shipping
1500 ASZA FAPR 1200 for shipping
2200 ASZA FAPR 1800 for shipping

SPAIN

Madrid Meteo 6918.5 ECA 7
10250.0

→ 120/576
0105 FUEU EDZW 300 hPa VT1200 (H+24)
0139 FUEU EDZW 500 hPa VT1200 (H+24)

0151	FUEU EDZW 700 hPa VT1200 (H+24) FUEU EDZW 850 hPa VT1200 (H+24)
0350	ASSP LEMM 0000
0402	AUSP LEMM 0000 300 hPa
0415	AUSP LEMM 0000 500 hPa
0430	FUSP LEMM 850/700/500/300 hPa VT0000 (H+12) limited area forecast model (INM)
0440	FBSP LEMM significant weather VT1200
0450	FUSA LEMM 300 hPa VT1200 (H+24)
0500	FBSA LEMM significant weather VT1200
0510	FUSA LEMM 200 hPa VT1200 (H+24)
0520	FUSA LEMM tropopause 250 hPa VT1200
0545	FBEU EDZW significant weather VT1200
0600	AUSP LEMM 0000 700 hPa
0615	AUSP LEMM 0000 850 hPa
0630	FSSP LEMM VT0000 (H+24)
0650	FUEU EDZW 300 hPa VT1800 FUEU EDZW 500 hPa VT1800 FUEU EDZW 700 hPa VT1800 FUEU EDZW 850 hPa VT1800
0825	FUSP LEMM 1000/850/500 hPa VT1200 (H+24, H+48, H+72) ECMWF
0900	FUSP LEMM 850/700/500/300 hPa VT1800 limited area forecast model (INM)
0910	FBSP LEMM significant weather VT1800
1015	FUSA LEMM 300 hPa VT1800 (H+18)
1025	FBSA LEMM significant weather VT1800
1035	FUSA LEMM 200 hPa VT1800 (H+18)
1045	FUSA LEMM tropopause 250 hPa VT1800
1105	AWSP LEMM 0600 wave analysis
1120	FSSP LEMM VT1200 (H+24)
1215	FWSP LEMM wave prognosis VT0600 (H+24)
1304	FUEU EDZW 300 hPa VT0000 (H+24)
1338	FUEU EDZW 500 hPa VT0000 (H+24)
1351	FUEU EDZW 700 hPa VT0000 (H+24) FUEU EDZW 850 hPa VT0000 (H+24)
1545	ASSP LEMM 1200
1558	AUSP LEMM 1200 300 hPa
1610	FUSA LEMM 300 hPa VT0000 (H+24)
1620	FBSA LEMM significant weather VT0000
1630	FUSA LEMM 200 hPa VT0000 (H+24)
1640	FUSA LEMM tropopause 250 hPa VT0000
1650	FUSP LEMM 850/700/500/300 hPa VT1200 (H+12) limited area forecast model (INM)
1700	FBSP LEMM significant weather VT0000
1710	SOSP LEMM 1200 sea surface temperature
1730	AWSP LEMM 1200 wave analysis (Monday - Saturday)
1750	AUSP LEMM 1200 500 hPa
1810	AUSP LEMM 1200 700 hPa
1830	AUSP LEMM 1200 850 hPa
1904	FUEU EDZW 300 hPa VT0600
1938	FUEU EDZW 500 hPa VT0600
1951	FUEU EDZW 700 hPa VT0600 FUEU EDZW 850 hPa VT0600
2150	FUSA LEMM 300 hPa VT0600 (H+18)
2200	FBSA LEMM significant weather VT0600
2210	FUSA LEMM 200 hPa VT0600 (H+18)
2220	FUSA LEMM tropopause 250 hPa VT0600
2230	FUSP LEMM 850/700/500/300 hPa VT1200 (H+18) limited area forecast model (INM)
2240	FBSP LEMM significant weather VT0600

USN Rota		
	7595.0	AOK
	9050.0	AOK
	10542.0	AOK

→ 120/576

0015	FSME1 LERT prognosis blend
0030	OSME1 LERT significant wave height
0048	surface pressure/temperature/winds analysis
0100	1000 hPa height/temperature/winds analysis
0112	850 hPa height/temperature/winds analysis
0124	500 hPa height/temperature/winds analysis
0136	300 hPa height/temperature/winds analysis
0148	surface pressure/thickness/winds prognosis (H+24)
0200	1000 hPa height/temperature/winds prognosis (H+24)
0212	850 hPa height/temperature/winds prognosis (H+24)
0224	500 hPa height/temperature/winds prognosis (H+24)
0236	300 hPa height/temperature/winds prognosis (H+24)
0248	surface pressure/winds prognosis (H+36)
0300	surface pressure/winds prognosis (H+60)
0312	surface pressure/winds prognosis (H+96)
0324	500 hPa height/winds prognosis (H+72)
0336	500 hPa height/winds prognosis (H+96)
0348	sea surface temperature analysis Mediterranean Sea
0400	FSME1 LERT prognosis blend
0415	OSME1 LERT significant wave height
0430	MFAX schedule
0442	MFAX schedule
0500	ECMWF surface pressure prognosis (H+72)
0512	ECMWF 500 hPa height prognosis (H+72)
0524	ECMWF surface pressure prognosis (H+96)
0536	ECMWF 500 hPa height prognosis (H+96)
0548	surface pressure/thickness/winds analysis
0600	1000 hPa height/temperature/winds analysis
0612	850 hPa height/temperature/winds analysis
0624	500 hPa height/temperature/winds analysis
0636	300 hPa height/temperature/winds analysis
0648	surface pressure/thickness/winds prognosis (H+24)
0700	1000 hPa height/temperature/winds prognosis (H+24)

0712	850 hPa height/temperature/winds prognosis (H+24)
0724	500 hPa height/temperature/winds prognosis (H+24)
0736	300 hPa height/temperature/winds prognosis (H+24)
0748	500 hPa height/vorticity analysis
0800	500 hPa height/vorticity prognosis (H+24)
0824	surface pressure/thickness/winds prognosis (H+36)
0836	1000 hPa height/temperature/winds prognosis (H+36)
0848	850 hPa height/temperature/winds prognosis (H+36)
0900	500 hPa height/temperature/winds prognosis (H+36)
0912	300 hPa height/temperature/winds prognosis (H+36)
0924	surface pressure/thickness/winds prognosis (H+48)
0936	1000 hPa height/temperature/winds prognosis (H+48)
0948	850 hPa height/temperature/winds prognosis (H+48)
1000	500 hPa height/temperature/winds prognosis (H+48)
1012	300 hPa height/temperature/winds prognosis (H+48)
1024	NORAPS surface pressure/winds analysis
1036	NORAPS 500 hPa height/temperature/winds analysis
1048	NORAPS surface pressure/winds prognosis (H+24)
1100	NORAPS 500 hPa height/temperature/winds prognosis (H+24)
1112	NORAPS surface pressure/winds prognosis (H+36)
1124	NORAPS 500 hPa height/temperature/winds prognosis (H+36)
1136	NORAPS surface pressure/winds prognosis (H+48)
1148	NORAPS 500 hPa height/temperature/winds prognosis (H+48)
1215	FSME1 LERT prognosis blend
1230	OSME1 LERT significant wave height
1248	surface pressure/temperature/winds analysis
1300	1000 hPa height/temperature/winds analysis
1312	850 hPa height/temperature/winds analysis
1324	500 hPa height/temperature/winds analysis
1336	300 hPa height/temperature/winds analysis
1348	surface pressure/thickness/winds prognosis (H+24)
1400	1000 hPa height/temperature/winds prognosis (H+24)
1412	850 hPa height/temperature/winds prognosis (H+24)
1424	500 hPa height/temperature/winds prognosis (H+24)
1436	300 hPa height/temperature/winds prognosis (H+24)
1448	surface pressure/winds prognosis (H+36)
1500	surface pressure/winds prognosis (H+60)
1512	surface pressure/winds prognosis (H+96)
1524	500 hPa height/winds prognosis (H+72)
1536	500 hPa height/winds prognosis (H+96)
1548	sea surface temperature analysis Mediterranean Sea
1600	FSME1 LERT prognosis blend
1615	OSME1 LERT significant wave height
1630	MFAX schedule
1642	MFAX schedule
1700	ECMWF surface pressure prognosis (H+72)
1712	ECMWF 500 hPa height prognosis (H+72)
1724	ECMWF surface pressure prognosis (H+96)
1736	ECMWF 500 hPa height prognosis (H+96)
1748	surface pressure/thickness/winds analysis
1800	1000 hPa height/temperature/winds analysis
1812	850 hPa height/temperature/winds analysis
1824	500 hPa height/temperature/winds analysis
1836	300 hPa height/temperature/winds analysis
1848	surface pressure/thickness/winds prognosis (H+24)
1900	1000 hPa height/temperature/winds prognosis (H+24)
1912	850 hPa height/temperature/winds prognosis (H+24)
1924	500 hPa height/temperature/winds prognosis (H+24)
1936	300 hPa height/temperature/winds prognosis (H+24)
1948	500 hPa height/vorticity analysis
2000	500 hPa height/vorticity prognosis (H+24)
2024	surface pressure/thickness/winds prognosis (H+36)
2036	1000 hPa height/temperature/winds prognosis (H+36)
2048	850 hPa height/temperature/winds prognosis (H+36)
2100	500 hPa height/temperature/winds prognosis (H+36)
2112	300 hPa height/temperature/winds prognosis (H+36)
2124	surface pressure/thickness/winds prognosis (H+48)
2136	1000 hPa height/temperature/winds prognosis (H+48)
2148	850 hPa height/temperature/winds prognosis (H+48)
2200	500 hPa height/temperature/winds prognosis (H+48)
2212	300 hPa height/temperature/winds prognosis (H+48)
2224	NORAPS surface pressure/winds analysis
2236	NORAPS 500 hPa height/temperature/winds analysis
2248	NORAPS surface pressure/winds prognosis (H+24)

2300	NORAPS 500 hPa height/temperature/ winds prognosis (H+24)
2312	NORAPS surface pressure/winds prognosis (H+36)
2324	NORAPS 500 hPa height/temperature/ winds prognosis (H+36)
2336	NORAPS surface pressure/winds prognosis (H+48)
2348	NORAPS 500 hPa height/temperature/ winds prognosis (H+48)

TAIWAN

T'ai-pei Meteo	4616.0	BMF
	5250.0	BMF
	8140.0	BMF
	13900.0	BMF
	18560.0	BMF

→ 120/576

0050	broadcast schedule
0120	0000 meteorological satellite image (GMS)
0200	0000 typhoon warning (in English and Chinese) (in case of typhoon)
0300	fishery weather forecast (in Chinese)
0400	ASAS RCTP 0000 with plotted data
0425	FSAS RCTP (H+24)
0450	test chart
0500	0300 typhoon warning (in English and Chinese) (in case of typhoon)
0720	0600 meteorological satellite image (GMS)
0800	0600 typhoon warning (in English and Chinese) (in case of typhoon)
0900	fishery weather forecast (in Chinese)
1000	ASAS RCTP 0600 with plotted data
1100	0900 typhoon warning (in English and Chinese) (in case of typhoon)
1320	1200 meteorological satellite image (GMS)
1400	1200 typhoon warning (in English and Chinese) (in case of typhoon)
1500	fishery weather forecast (in Chinese)
1600	ASAS RCTP 1200 with plotted data
1700	1500 typhoon warning (in English and Chinese) (in case of typhoon)
1920	1800 meteorological satellite image (GMS)
2000	1800 typhoon warning (in English and Chinese) (in case of typhoon)
2100	fishery weather forecast (in Chinese)
2200	ASAS RCTP 1800 with plotted data
2300	2100 typhoon warning (in English and Chinese) (in case of typhoon)

THAILAND

Bangkok Meteo	7395.0	HSW 64
	17520.0	HSW 61

→ 120/576

0050	test chart
0100	FZTH VTBB VT0000 (plain language)
0120	FSAS ECMF VT1200
0140	ASAS VTBB 1800 retransmission of 2320
0200	manual amendment
0300	FSAS ECMF (H+24)
0320	FSAS ECMF (H+48)
0340	FSAS ECMF (H+72)
0400	FZTH VTBB VT0300 (plain language)
0420	FUAS ECMF 850 hPa (H+24)
0500	ASAS VTBB 0000
0520	AUAS VTBB 0000 850 hPa
0540	AUAS VTBB 0000 700 hPa
0600	AUAS VTBB 0000 500 hPa
0700	FZTH VTBB VT0600 (plain language)
0720	FSAS ECMF (H+24) retransmission of 0300
0740	FSAS ECMF (H+48) retransmission of 0320
0800	FSAS ECMF (H+72) retransmission of 0340
0820	FUAS ECMF 850 hPa (H+24) retransmission of 0420
1000	FZTH VTBB VT0900 (plain language)
1020	ASAS VTBB 0600
1300	FZTH VTBB VT1200 (plain language)
1700	FZTH VTBB VT1700 (plain language)
1720	ASAS VTBB 1200
2300	FZTH VTBB VT1700 (plain language) retransmission of 1700
2320	ASAS VTBB 1800

TURKEY

Ankara Meteo	3377.0	YMA 20
	6790.0	YMA 20

→ 90/576

0330	FUTU LTAA ECMWF 500 hPa VT1200 (H+24, H+36)
0430	ASTU LTAA 0000
0500	test chart
0610	ASTU LTAA 0300
0640	AUTU LTAA 0000 500 hPa
0710	AUTU LTAA 0000 300 hPa
0740	FBTU LTAA VT0000 (H+24)
0810	FUTU LTAA 700 hPa VT0000 (H+24)
0840	FUTU LTAA 300 hPa VT0000 (H+24)
0910	FUTU LTAA ECMWF 500 hPa VT1200 (H+48, H+72)
0940	ASTU LTAA 0600
1010	FBTU LTAA VT0000 tropopause
1040	AUTU LTAA 0000 maximum wind analysis
1240	ASTU LTAA 0900
1610	ASTU LTAA 1200
1710	FBTU LTAA VT1200

1840	ASTU LTAA 1500
1910	AUTU LTAA 1200 500 hPa
1940	AUTU LTAA 1200 200 hPa
2015	AUTU LTAA 1200 300 hPa
2152	ASTU LTAA 1800

UNITED KINGDOM

MetFax Bracknell

MetFax is a dial-up weatherfax service for customers that have access to a telefax machine with polling receive mode. For users in the United Kingdom there is no need to register or subscribe; MetFax is a premium rate telephone service (36 p cheap rate / 48 p all other times). Users outside of the United Kingdom can now make use of the new subscription MetFax service. Most products take between two and five minutes to transmit. There are three subservices, namely aviation, education and marine. For more details contact: The Met Office, MetFax Database Manager, Sutton House, London Road, BRACKNELL RG12 2SY [telephone helpline 0344 854435, telefax helpline 0344 854018].

General

0336 400 598	GPS newsletter (background information)
0336 400 599	GPS newsletter (status report)
0891 449 9*AN*	local weather forecast for today
0891 449 9*AN*	regional weather forecast for tomorrow and the next three days

Aviation

0336 400 501	index page
0336 400 502	surface analysis / forecast (H + 24) charts
0336 400 503	United Kingdom low level weather / spot wind charts
0336 400 504	surface forecast (H + 48/72) chart / 3-day planning text (South)
0336 400 505	explanatory notes for the United Kingdom low level weather chart
0336 400 506	4 tephigrams temperature/height chart
0336 400 507	regional AIRMET South text
0336 400 508	regional AIRMET North text
0336 400 509	regional AIRMET Scottish text
0336 400 510	AIRMET index page
0336 400 520	METAR/TAF index page
0336 400 521	METAR South England, South Wales, Channel Islands
0336 400 522	METAR Southeast England, Midlands, Wales
0336 400 523	METAR North England, Scotland, Ireland
0336 400 524	METAR Southeast England, Channel Islands, France
0336 400 525	METAR Europe
0336 400 530	TAF 18 hours bulletin
0336 400 531	TAF South England, South Wales, Channel Islands
0336 400 532	TAF Southeast England, Midlands, Wales
0336 400 533	TAF North England, Scotland, Ireland
0336 400 534	TAF Southeast England, Channel Islands, France
0336 400 535	TAF Europe
0336 400 537	visible and infra-red satellite picture
0336 400 538	guide to satellite images
0336 400 539	infra-red satellite picture
0336 400 540	METAR/TAF decoding
0336 400 541	RAFC European FL 100-450 significant weather / European medium-height spot winds
0336 400 542	European low level weather / European low level spot winds
0336 400 544	surface forecast (H + 48/72) chart / 3-day planning text (North)

Marine

0336 400 400	main index page of all services
0336 400 401	index page
0336 400 441	shipping forecast (H + 24)
0336 400 442	map of shipping areas
0336 400 443	description of Beaufort scale
0336 400 444	surface analysis
0336 400 445	surface forecast (H + 24)
0336 400 446	guide to surface charts
0336 400 447	latest weather reports
0336 400 448	guide and index to chart of reports
0336 400 450	3-5 days national inshore waters forecast / forecast (H + 48/72)
0336 400 *ANR*	2-day local inshore forecast / forecast (H + 00/24)
0336 400 468	2-5 days Northwest Scottish shipping areas planning forecast / forecast (H + 48/72)
0336 400 469	2-5 days Northern North Sea shipping areas planning forecast / forecast (H + 48/72)
0336 400 471	2-5 days Channel waters forecast / forecast (H + 48/72)
0336 400 472	2-5 days Southern North Sea waters forecast / forecast (H + 48/72)
0336 400 473	2-5 days Irish Sea forecast / forecast (H + 48/72)
0336 400 498	guide to satellite images
0336 400 499	satellite picture

Education

0336 400 438	guide to satellite images
0336 400 439	infra-red satellite image
0336 400 475	plotted map of latest weather reports from Eastern USA and the Caribbean
0336 400 476	guide to plotted reports including index of report locations from Eastern USA and the Caribbean

0336 400 477	table of monthly statistics of Northern United Kingdom weather stations
0336 400 478	table of monthly statistics of Southern United Kingdom weather stations
0336 400 479	information factsheet - a new topic each month
0336 400 480	index page
0336 400 484	surface analysis
0336 400 485	surface forecast (H + 24)
0336 400 486	guide to interpreting synoptic charts
0336 400 487	plotted map of latest weather reports from across the United Kingdom
0336 400 488	guide to plotted reports including index of report locations across the United Kingdom
0336 400 489	world weather news

Bracknell Meteo	2618.5	GFE 25
	4610.0	GFA 22
	8040.0	GFA 23
	14436.0	GFE 23
	18261.0	GFE 24

→ 120/576	
0000	PWAE25 EGRR NAT FL340 VT1200 (H + 24)
0012	PWAE30 EGRR NAT FL300 VT1200 (H + 24)
0024	PWAE20 EGRR NAT FL390 VT1200 (H + 24)
0036	PWAE50 EGRR NAT FL180 VT1200 (H + 24)
0048	PWBE20 EGRR EUR FL390 VT1200 (H + 24)
0100	PWBE25 EGRR EUR FL340 VT1200 (H + 24)
0112	PWBE30 EGRR EUR FL300 VT1200 (H + 24)
0124	PWBE40 EGRR EUR FL240 VT1200 (H + 24)
0136	PWBE50 EGRR EUR FL180 VT1200 (H + 24)
0148	PWBE70 EGRR EUR FL100 VT1200 (H + 24)
0200	PWBE85 EGRR EUR FL50 VT1200 (H + 24)
0224	PGAE06 EGRR NAT significant weather VT1200 (H + 24)
0236	PGCE15 EDZW MID significant weather VT1200 (H + 24)
0248	PGBE15 EDZW EUR significant weather VT1200 (H + 24)
0300	PLXX22 EGRR VT1200 plain language WAFS amendments
0305	PWDE30 EGRR AFI FL300 VT1200 (H + 24)
0317	PWDE20 EGRR AFI FL390 VT1200 (H + 24)
0329	PWDE25 EGRR AFI FL340 VT1200 (H + 24)
→ 120/288	
0341	PPVA98 EGRR 0000
→ 120/576	
0347	PGDE15 LFPW 1200 AFI significant weather (H + 24)
→ 120/288	
0431	PPVE98 EGRR 0000 (H + 24)
→ 120/576	
0518	PWBD85 EGRR EUR FL50 VT0000 (H + 18)
0530	PWCD25 EGRR MID FL340 VT0000 (H + 18)
0542	PWCD30 EGRR MID FL300 VT0000 (H + 18)
0554	PWCD20 EGRR MID FL390 VT0000 (H + 18)
0606	PWAD25 EGRR NAT FL340 VT0000 (H + 18)
0618	PWAD30 EGRR NAT FL300 VT0000 (H + 18)
0630	PWAD20 EGRR NAT FL390 VT0000 (H + 18)
0642	PWAD50 EGRR NAT FL180 VT0000 (H + 18)
0654	PWBD20 EGRR EUR FL390 VT0000 (H + 18)
0706	PWBD25 EGRR EUR FL340 VT0000 (H + 18)
0718	PWBD30 EGRR EUR FL300 VT0000 (H + 18)
0730	PWBD40 EGRR EUR FL240 VT0000 (H + 18)
0742	PWBD50 EGRR EUR FL180 VT0000 (H + 18)
0754	PWBD70 EGRR EUR FL100 VT0000 (H + 18)
→ 120/288	
0806	PPWK98 EGRR VT0000 surface / thickness 500/1000 hPa (H + 48, H + 72)
0812	PPVA98 EGRR 0000
→ 120/576	
0824	PGAD06 EGRR NAT significant weather VT0000 (H + 18)
0836	PGCD15 EDZW MID significant weather VT0000 (H + 18)
0848	PGBD15 EDZW EUR significant weather VT0000 (H + 18)
0900	PWDD25 EGRR AFI FL340 VT0000 (H + 18)
0912	PWDD30 EGRR AFI FL300 VT0000 (H + 18)
0924	PLXX21 EGRR VT0000 plain language WAFS amendments
→ 120/288	
0929	PJGA93 EGRR 0000 wave analysis
0935	PJGE93 EGRR wave prognosis VT0000 (H + 24)
0941	PPVA98 EGRR 0600
→ 120/576	
0947	PWDD20 EGRR AFI FL390 VT0000 (H + 18)
→ 120/288	
1010	PJGI93 EGRR sea/swell VT0000 (H + 48)
→ 120/576	
1016	PGDD15 LFPW AFI significant weather VT0000 (H + 18)
→ 120/288	
1031	PPVE98 EGRR 0600 (H + 24)
1045	PPWK98 EGRR surface / thickness 500/1000 hPa VT0000 (H + 48, H + 72)

→ 120/576
1051 PLNT21 EGRR extended North Atlantic inference
1124 PWCE25 EGRR VT0000 MID FL340 (H+24)
1136 PWCE30 EGRR MID FL300 VT0000 (H+24)
1148 PWCE20 EGRR MID FL390 VT0000 (H+24)
1200 PWAE25 EGRR NAT FL340 VT0000 (H+24)
1212 PWAE30 EGRR NAT FL300 VT0000 (H+24)
1224 PWAE20 EGRR NAT FL390 VT0000 (H+24)
1236 PWAE50 EGRR NAT FL180 VT0000 (H+24)
1248 PWBE20 EGRR EUR FL390 VT0000 (H+24)
1300 PWBE25 EGRR EUR FL340 VT0000 (H+24)
1312 PWBE30 EGRR EUR FL300 VT0000 (H+24)
1324 PWBE40 EGRR EUR FL240 VT0000 (H+24)
1336 PWBE50 EGRR EUR FL180 VT0000 (H+24)
1348 PWBE70 EGRR EUR FL100 VT0000 (H+24)
1400 PMUK21 EGRR radio frequency check
→ 120/288
1412 PTUK21 EGRR sea temperature analysis for British waters
→ 120/576
1424 PGAE06 EGRR NAT significant weather VT0000 (H+24)
1436 PGCE15 EDZW MID significant weather VT0000 (H+24)
1448 PGBE15 EDZW EUR significant weather VT0000 (H+24)
1500 PWDE30 EGRR AFI FL300 VT0000 (H+24)
1512 PWDE20 EGRR AFI FL390 VT0000 (H+24)
1524 PWDE25 EGRR AFI FL340 VT0000 (H+24)
1536 PLXX22 EGRR VT0000 plain language WAFS amendments
→ 120/288
1541 PPVA98 EGRR 1200
→ 120/576
1547 PGDE15 LFPW AFI significant weather VT0000 (H+24)
1602 PINT21 EGRR sea ice
1622 PLUK21 EGRR general notices
→ 120/288
1631 PPVE98 EGRR VT1200 (H+24)
→ 120/576
1718 PWBD85 EGRR EUR FL50 VT1200 (H+18)
1730 PWCD25 EGRR MID FL340 VT1200 (H+18)
1742 PWCD30 EGRR MID FL300 VT1200 (H+18)
1754 PWCD20 EGRR MID FL390 VT1200 (H+18)
1806 PWAD25 EGRR NAT FL340 VT1200 (H+18)
1818 PWAD30 EGRR NAT FL300 VT1200 (H+18)
1830 PWAD20 EGRR NAT FL390 VT1200 (H+18)
1842 PWAD50 EGRR NAT FL180 VT1200 (H+18)
1900 PWBD20 EGRR EUR FL390 VT1200 (H+18)
1912 PWBD25 EGRR EUR FL340 VT1200 (H+18)
1924 PWBD30 EGRR EUR FL300 VT1200 (H+18)
1936 PWBD40 EGRR EUR FL240 VT1200 (H+18)
1948 PWBD50 EGRR EUR FL180 VT1200 (H+18)
2000 PWBD70 EGRR EUR FL100 VT1200 (H+18)
→ 120/288
2012 PJGA93 EGRR 1200 wave analysis
2018 PJGE93 EGRR wave prognosis VT1200 (H+24)
→ 120/576
2024 PGAD06 EGRR NAT significant weather VT1200 (H+18)
2036 PGCD15 EDZW MID significant weather VT1200 (H+18)
2048 PGBD15 EDZW EUR significant weather VT1200 (H+18)
2100 PGDD15 LFPW AFI significant weather VT1200 (H+18)
2115 PWDD30 EGRR AFI FL300 VT1200 (H+18)
→ 120/288
2141 PPVA98 EGRR 1800
→ 120/576
2147 PLXX21 EGRR VT1200 plain language WAFS amendments
→ 120/288
2152 PJGI93 EGRR sea/swell VT1200 (H+48)
→ 120/576
2158 PWDD20 EGRR AFI FL390 VT1200 (H+18)
2210 PWDD25 EGRR AFI FL340 VT1200 (H+18)
→ 120/288
2222 PPWK98 EGRR surface / thickness 500/1000 hPa VT1200 (H+48, H+72)
2231 PPVE98 EGRR VT1800 (H+24)
→ 120/576
2251 PWCE25 EGRR MID FL340 VT1200 (H+24)
2303 PWCE30 EGRR MID FL300 VT1200 (H+24)
2315 PWCE20 EGRR MID FL390 VT1200 (H+24)
2327 PPVE98 EGRR VT1800 (H+24)

RN London	3652.0	GYA
	4307.0	GYA
	6452.5	GYA
	8331.5	GYA

→ 120/576
0230 schedule
0320 0000 surface analysis

0400	significant surface wind and weather prognosis VT1800
0440	satellite pictures
0540	selected upper air ascents 0000
0600	gale summary
0620	NAC TAFs
0650	0000 surface analysis
0730	significant surface wind and weather prognosis VT1800
0750	1200 combined 0° and 2° analysis
0950	0600 surface analysis
1040	satellite picture
1130	gale warnings
1150	significant surface wind and weather prognosis VT0600
1210	0600 surface analysis
1230	sea and swell prognosis VT0000
1300	sea surface temperature analysis
1330	satellite picture
1350	special / OC data chart
1425	NAC TAFs
1500	1200 surface analysis
1530	schedule
1640	gale summary
1710	1200 selected upper air ascents
1730	satellite pictures
1800	1200 surface analysis
1950	gale summary
2025	significant surface wind and weather prognosis VT0600
2050	sea and swell prognosis VT0000
2120	surface analysis 1800
2320	surface analysis 1800

UNITED STATES OF AMERICA

USCG Boston, MA	6340.5	NMF
	9110.0	NMF
	12750.0	NMF

→ 120/576

0230	FAX header
0233	preliminary surface analysis
0243	fax schedule part 1
0254	fax schedule part 2
0305	request for comments
0315	product notice bulletin
0325	0000 surface analysis East Atlantic
0338	0000 surface analysis West Atlantic
0351	satellite image
0402	0000 surface analysis East Atlantic
0415	0000 surface analysis West Atlantic
0428	0000 500 hPa analysis
0800	FAX header
0805	preliminary surface analysis
0815	surface forecast (H+24)
0825	wind/wave forecast (H+24)
0835	surface forecast (H+36)
0845	wind/wave forecast (H+36)
0855	surface forecast (H+48)
0905	sea state forecast (H+48)
0915	500 hPa forecast (H+48)
0925	0600 surface analysis East Atlantic
0938	0600 surface analysis West Atlantic
0951	0600 satellite image
1002	surface analysis East Atlantic
1015	surface analysis West Atlantic
1430	fax header
1433	preliminary surface analysis
1443	500 hPa forecast (H+96)
1453	surface forecast (H+96)
1503	satellite image
1515	sea state analysis (meters)
1525	surface analysis East Atlantic
1538	surface analysis West Atlantic
1720	FAX header
1723	1200 surface analysis East Atlantic
1736	1200 surface analysis West Atlantic
1749	500 hPa analysis
1900	FAX header
1903	fax schedule part 1
1914	fax schedule part 2
1925	request for comments / product notice bulletin
1935	Gulf Stream analysis
1945	Gulf Stream analysis
1955	Gulf Stream analysis
2005	preliminary surface analysis
2015	surface forecast (H+24)
2025	wind/wave forecast (H+24)
2035	surface forecast (H+36)
2045	wind/wave forecast (H+36)
2055	surface forecast (H+48)
2105	sea state forecast (H+48)
2115	500 hPa forecast (H+48)
2125	surface analysis East Atlantic
2138	surface analysis West Atlantic
2151	satellite image
2202	surface analysis East Atlantic
2215	surface analysis West Atlantic

USCG New Orleans, LA	4316.0	NMG
	8504.0	NMG
	12790.0	NMG
	17148.0	NMG

→ 120/576

0005	surface prognosis Gulf of Mexico (H+18/H+36)
0230	surface analysis Gulf of Mexico
0500	high seas prognosis (H+36)
0735	surface prognosis USA
0920	surface analysis Gulf of Mexico
1100	high seas prognosis (H+36)
1125	tropical surface analysis
1205	surface prognosis Gulf of Mexico (H+18/H+36)
1430	surface analysis Gulf of Mexico
1500	schedule
1700	high seas prognosis (H+36)
1910	surface analysis USA
2020	surface analysis Gulf of Mexico
2100	oceanographic products (when available) • Gulf of Mexico and Atlantic Ocean sea surface temperature (Monday, Wednesday, Friday) • Gulf Stream analysis (Tuesday, Thursday, Saturday)
2300	high seas prognosis (H+36)
2325	tropical surface analysis

USCG San Francisco, CA	4346.0	NMC
	8682.0	NMC
	12730.0	NMC
	17151.2	NMC
	22527.0	NMC

→ 120/576

0245	test pattern
0248	satellite picture
0259	satellite picture
0310	0000 surface analysis part 1
0323	0000 surface analysis part 2
0335	0000 sea state analysis
0345	0000 surface analysis part 1
0358	0000 surface analysis part 2
0410	0000 500 hPa analysis
0815	test pattern
0815	wind/wave prognosis VT0000 (H+24)
0828	significant weather prognosis VT0000 (H+24)
0838	500 hPa prognosis VT0000 (H+48)
0848	surface prognosis VT0000 (H+48)
0858	sea prognosis VT0000 (H+48)
0908	satellite picture
0919	0600 surface analysis part 1
0932	0600 surface analysis part 2
0944	satellite picture
0955	0600 surface analysis part 1
1008	0600 surface analysis part 2
1100	test pattern
1104	schedule part 1
1115	schedule part 2
1126	request for comments
1137	product notice bulletin
1148	sea surface temperature analysis East Pacific
1158	sea surface temperature analysis East Pacific
1415	test pattern
1418	500 hPa prognosis VT0000 (H+96)
1428	surface prognosis VT0000 (H+96)
1438	satellite picture
1449	satellite picture
1500	sea surface temperature analysis East Pacific
1510	1200 surface analysis part 1
1523	1200 surface analysis part 2
1535	1200 tropical analysis
1545	1200 surface analysis part 1
1558	1200 surface analysis part 2
1610	1200 500 hPa analysis
2015	test pattern
2018	wind/wave prognosis VT1200 (H+24)
2028	significant weather prognosis VT1200 (H+24)
2038	500 hPa prognosis VT1200 (H+48)
2048	surface prognosis VT1200 (H+48)
2058	sea prognosis VT1200 (H+48)
2108	satellite picture
2119	1800 surface analysis part 1
2132	1800 surface analysis part 2
2144	1800 tropical analysis
2154	1800 surface analysis part 1
2207	1800 surface analysis part 2
2300	test pattern
2304	sea surface temperature analysis
2314	sea surface temperature analysis
2324	schedule part 1
2335	schedule part 2

USN Norfolk, VA	3357.0	NAM
	8080.0	NAM
	10865.0	NAM
	15959.0	NAM
	20015.0	NAM

→ 120/576

0000	satellite image
0015	NFAX schedule 0000-0800
0025	open period
0030	NOGAPS 200 hPa prognosis VT1200 (H+48)
0040	NOGAPS surface pressure prognosis VT1200 (H+72)
0050	NOGAPS 500 hPa prognosis VT1200 (H+72)
0100	satellite image
0115	open period
0120	NMC surface pressure prognosis VT1200 (H+72)
0130	NMC 500 hPa prognosis VT1200 (H+72)
0140	NMC surface pressure prognosis VT1200 (H+96)
0150	NMC 500 hPa prognosis VT1200 (H+96)
0200	satellite image
0215	open period
0220	NMC surface pressure prognosis VT1200 (H+120)
0230	open period
0240	NMC 500 hPa prognosis VT1200 (H+120)
0250	NORAPS surface pressure prognosis VT1200 (H+12)
0300	NORAPS 500 hPa prognosis VT1200 (H+12)
0310	NLMOC sea surface temperature analysis
0320	NLMOC sea surface temperature analysis
0330	NFAX schedule 0800-1700
0340	NFAX schedule 1700-0000
0350	open period
0400	satellite image
0415	open period
0420	NORAPS surface pressure prognosis VT1200 (H+24)
0430	NORAPS 500 hPa prognosis VT1200 (H+24)
0440	NORAPS surface pressure prognosis VT1200 (H+36)
0450	NORAPS 500 hPa prognosis VT1200 (H+36)
0500	satellite image
0515	NLMOC prognosis blend VT1200 (H+48)
0530	open period
0600	satellite image
0615	open period
0630	NOGAPS 0000 surface pressure analysis
0640	NOGAPS 0000 850 hPa analysis
0650	NOGAPS 0000 700 hPa analysis
0700	satellite image
0715	open period
0720	NOGAPS 0000 500 hPa analysis
0730	NOGAPS 0000 300 hPa analysis
0740	NOGAPS 0000 200 hPa analysis

0750	NOGAPS surface pressure prognosis VT0000 (H+12)
0800	satellite image
0815	open period
0820	NOGAPS 850 hPa prognosis VT0000 (H+12)
0830	NMC significant weather prognosis VT0000 (H+12)
0840	NOGAPS surface pressure prognosis (H+24)
0850	NOGAPS 850 hPa prognosis VT0000 (H+24)
0900	NOGAPS 700 hPa prognosis VT0000 (H+24)
0910	NOGAPS 500 hPa prognosis VT0000 (H+24)
0920	open period
0930	satellite image
0945	open period
1000	satellite image
1015	NLMOC high wind/seas warning
1030	NOGAPS 300 hPa prognosis VT0000 (H+24)
1040	NOGAPS 200 hPa prognosis VT0000 (H+24)
1050	NOGAPS surface pressure prognosis VT0000 (H+48)
1100	satellite image
1120	NOGAPS 850 hPa prognosis VT0000 (H+48)
1130	NOGAPS 700 hPa prognosis VT0000 (H+48)
1140	NOGAPS 500 hPa prognosis VT0000 (H+48)
1150	NOGAPS 300 hPa prognosis VT0000 (H+48)
1200	satellite image
1215	NFAX schedule 0000-0800
1225	open period
1230	NOGAPS 200 hPa prognosis VT0000 (H+48)
1240	NOGAPS surface pressure prognosis VT0000 (H+72)
1250	NOGAPS 500 hPa prognosis VT0000 (H+72)
1300	satellite image
1315	open period
1320	NOGAPS surface pressure prognosis VT0000 (H+96)
1330	NOGAPS 500 hPa prognosis VT0000 (H+96)
1340	NOGAPS surface pressure prognosis VT0000 (H+120)
1350	NOGAPS 500 hPa prognosis VT0000 (H+120)
1400	satellite image
1415	open period
1420	NORAPS 0000 surface pressure analysis
1430	open period
1440	NORAPS 0000 500 hPa analysis
1450	NORAPS surface pressure prognosis VT0000 (H+12)
1500	NORAPS 500 hPa prognosis VT0000 (H+12)
1515	FNMOC 0000 sea surface temperature analysis
1530	NFAX schedule 0800-1700
1540	NFAX schedule 1700-0000
1550	open period
1600	satellite image
1615	open period
1620	NORAPS surface pressure prognosis VT0000 (H+24)
1630	NORAPS 500 hPa prognosis VT0000 (H+24)
1640	NORAPS surface pressure prognosis VT0000 (H+36)
1650	NORAPS 500 hPa prognosis VT0000 (H+36)
1700	satellite image
1715	NLMOC prognosis blend VT0000 (H+48)
1730	open period
1800	satellite image
1815	NLMOC 1200 sea height analysis
1830	NOGAPS 1200 surface pressure analysis
1840	NOGAPS 1200 850 hPa analysis
1850	NOGAPS 1200 700 hPa analysis
1900	satellite image
1915	open period
1920	NOGAPS 1200 500 hPa analysis
1930	NOGAPS 1200 300 hPa analysis
1940	NOGAPS 1200 200 hPa analysis
1950	NOGAPS surface pressure prognosis VT1200 (H+12)
2000	satellite image
2015	open period
2020	NOGAPS 850 hPa prognosis VT1200 (H+12)
2030	NMC significant weather prognosis VT1200 (H+12)
2040	NOGAPS surface pressure prognosis (H+24)
2050	NOGAPS 850 hPa prognosis VT1200 (H+24)
2100	NOGAPS 700 hPa prognosis VT1200 (H+24)
2110	NOGAPS 500 hPa prognosis VT1200 (H+24)
2130	satellite image
2145	NLMOC prognosis blend VT0000 (H+84)
2200	satellite image
2215	NLMOC high wind/seas warning
2230	NOGAPS 300 hPa prognosis VT1200 (H+24)
2240	NOGAPS 200 hPa prognosis VT1200 (H+24)
2250	NOGAPS surface pressure prognosis VT1200 (H+48)
2300	satellite image
2320	NOGAPS 850 hPa prognosis VT1200 (H+48)
2330	NOGAPS 700 hPa prognosis VT1200 (H+48)
2340	NOGAPS 500 hPa prognosis VT1200 (H+48)
2350	NOGAPS 300 hPa prognosis VT1200 (H+48)

USN San Francisco, CA	6453.0	NPG
	9090.0	NPG

(schedule see under USN Pearl Harbour, Hawaii)

UZBEKISTAN

Tashkent Meteo	3280.0	RBX 70
	5285.0	RBX 71
	8083.0	RIJ 75
	9150.0	RCH 73
	13947.0	ROM 5

→ 90/576
0050 SDRA RUTK 0000
→ 60/576
0130 FBRA RUTK 1200 significant weather chart VT0600
→ 90/576
0258 FURA KWBC 0000 500 hPa (H+48)
0315 AUXX RUTK 0000 300 hPa
0350 SDRA RUTK 0300
0410 AUXX RUTK 0000 500 hPa
0500 ASXX RUTK 0300
0550 AUXX RUTK 0000 200 hPa
0625 SMXX RUTK 0300 precipitation and minimum temperatures
0640 AUXX RUTK 0000 400 hPa
0715 AUXX RUTK 0000 100 hPa
0750 FBRA/FUXX RUTK 0000 significant weather chart and prognosis 300 hPa (VT1500)
→ 60/576
0830 AUXN RUTK 0600 500 hPa
→ 90/576
0915 AUXX RUTK 0000 maximum wind chart
0950 SDRA RUTK 0900
1115 FBXX RUTK significant weather chart and prognosis 300 hPa (VT1800)
1250 SDRA RUTK 1200
→ 60/576
1325 FBXX RUTK 0000 prebaric chart (VT1800)
→ 90/576
1515 AUXX RUTK 1200 300 hPa
1550 SDRA RUTK 1500
1605 AUXX RUTK 1200 500 hPa
1640 AUXX RUTK 1200 850 hPa
1720 AUXX RUTK 1200 200 hPa
1755 AUXX RUTK 1200 100 hPa
1830 AHXX RUTK 1200 500/1000 hPa
1905 SDRA RUTK 1800
1930 FBXX RUTK 1200 significant weather chart and prognosis (VT0000)
2015 AUXX RUTK 1200 maximum wind chart
2105 AUXX RUTK 1800 850 hPa
2122 AUXX RUTK 1800 700 hPa
2139 AUXX RUTK 1800 500 hPa
2155 AUXX RUTK 1800 400 hPa
2212 AUXX RUTK 1800 300 hPa
2320 FBXX RUTK significant weather chart and prognosis 300 hPa (VT0600)

Tashkent Meteo	3690.0	RBV 70
	4365.0	RPJ 78
	5890.0	RBV 78
	7570.0	RBX 72
	9340.0	RCH 72
	14982.5	RBV 76

→ 90/576
0110 SDRA RUTK 0000
→ 60/576
0130 FBRA RUTK 1200 significant weather chart (VT0600)
0155 ASXX RUTK 0000
0255 ASXX RUTK 0000
→ 90/576
0345 AUXX RUTK 0000 700 hPa
0420 ANXX RUTK nephanalysis
→ 120/576
0450 AUXX RUTK 0000 300 hPa
→ 90/576
0515 AUXX RUTK 0000 850 hPa
→ 120/288
0625 FUXX RUTK 0000 500 hPa (H+36)
→ 90/576
0633 FXXX RUTK 0000 vertical motion at 850/700/500 hPa (H+36)
0650 SDRA RUTK 0600
0720 AUXX RUTK 0000 400 hPa
→ 60/576
0755 ASXX RUTK 0600
0845 AUXX RUTK 0600 50 hPa
→ 90/576
0930 AUXX RUTK 0000 tropopause
1005 AHXX RUTK 0000 500/1000 hPa
→ 60/576
1055 ASXX RUTK 0900
→ 90/576
1215 ANXX RUTK nephanalysis
→ 60/576
1325 FBRA RUTK 0000 significant weather chart (VT1800)
1355 ASXX RUTK 1200
1455 ASXX RUTK 1200
→ 90/576
1540 AUXX RUTK 1200 700 hPa
1615 AUXX RUTK 1200 400 hPa
→ 60/576
1655 ASXX RUTK 1500
→ 90/576
1745 AUXX RUTK 1200 500/1000 hPa
→ 120/288
1850 FUXX RUTK 1200 500 hPa (H+36)
→ 60/576
1905 SMXX RUTK 1500 precipitation and extremes of temperatures
1930 ASXX RUTK 1800
2020 ASXX RUTK 1800
→ 90/576
2105 FXXX RUTK 1200 vertical motion at 850/700/500 hPa (H+36)
2122 AUXX RUTK 1200 tropopause
2200 SDRA RUTK 2100
→ 60/576
2255 ASXX RUTK 2100
→ 90/576
2345 AXXX/FXXX RUTK 1200 vertical motion at 850/700/500 hPa (H+24) ☺

12 NAVTEX transmissions on 518 kHz

The Maritime Safety Information (MSI) service is an integral part of the Global Maritime Distress and Safety System (GMDSS). This fully automated service provides printed navigational and meteorological warnings and messages as well as Search and Rescue (SAR) information to ships. The majority of MSI is addressed to coastal regions, particularly where there is a high density of marine traffic, because these are the circumstances in which most hazards to safety occur. See the United States Coast Guard pages at *http://www.navcen.uscg.mil/marcomms/gmdss/gmdss.htm* in our brandnew INTERNET RADIO GUIDE for details.

NAVTEX is the terrestrial part of the MSI system, transmitting navigational and meteorological warnings and urgent information from selected coast stations to ships on 518.0 kHz. It is a time-shared service designed for the transmission of MSI up to a range of about 400 nautical miles, developed especially to provide broadcasts to such waters as described above. The modulation and teleprinter system used is NBDPT SITOR-B; for the complete description of the standard operational and technical characteristics please refer to chapter 18.28 in our RADIO DATA CODE MANUAL.

The equipment fitting programme decided by the 1988 GMDSS Conference prescribes that every cargo ship of 300 gross tons and more, and every passenger ship, must be equipped with a NAVTEX receiver since 01 AUG 1993.

The frequency 490 kHz will become available for NAVTEX transmissions after the full implementation of the GMDSS.

The current NAVTEX schedule follows. The stations are arranged alphabetically within geographical regions. Listed are

- name of the station and ITU country/geographical symbol;
- call sign;
- B1 character = transmitter coverage area identifier;
- times of transmission.

Caribbean Sea

USCG Miami, FL, USA	NMA	A	0000	0400	0800	1200	1600	2000
USCG New Orleans, LA, USA	NMG	G	0300	0700	1100	1500	1900	2300
USCG San Juan, PTR	NMR	R	0200	0600	1000	1400	1800	2200

East and South China Sea

Bangkok R, THA	HSA	F	0050	0450	0850	1250	1650	2050
Dalian R, CHN	XSZ	R	0250	0650	1050	1450	2250	
Guangzhou R, CHN	XSQ	N	0210	0610	1010	1410	2210	
Jakarta R, INS	PKX	E	0040	0440	0840	1240	1640	2040
Shanghai R, CHN	XSG	Q	0240	0640	1040	1440	2240	
Singapore R, SNG	9VG	C	0020	0420	0820	1220	1620	2020
Victoria Harbour R, HKG	VRX	L	0150	0550	0950	1350	1750	2150

East Pacific

Antofagasta R, CHL	CBA	A	English		0400	1200	2000	
		H	Spanish		0000	0800	1600	
Callao R, PRU	OBC	U	0320	0720	1120	1520	1920	2320

CCG Prince Rupert, BC, CAN	VAJ	C	0430	0830	1230	1630	2030	
		D	0030	1205				
CCG Tofino, BC, CAN	VAE	H	0110	0510	0910	1310	1710	2110
Guayaquil R, EQA	HCG	M	0200	0600	1000	1400	1800	2200
Hanga Roa R, PAQ	CBY	F	English		0450	1250	2050	
		M	Spanish		0050	0850	1650	
Magallanes R, CHL	CBM	E	English		0440	1240	2040	
		L	Spanish		0040	0840	1640	
Mollendo R, PRU	CBF	W	0340	0740	1140	1540	1940	2340
Paita R, PRU	OBY	S	0230	1630	2130			
Puerto Montt R, CHL	CBP	D	English		0430	1230	2030	
		K	Spanish		0030	0830	1630	
Talcahuano R, CHL	CBT	C	English		0420	1220	2220	
		J	Spanish		0020	0820	1620	
USCG Astoria, OR, USA	NMT	W	0130	0530	0930	1330	1730	2130
USCG Honolulu, HWA	NMO	O	0040	0440	0840	1240	1640	2040
USCG Kodiak, ALS	NOJ	J	0300	0700	1100	1500	1900	2300
USCG Long Beach, CA, USA	NMQ	Q	0045	0445	0845	1245	1645	2045
USCG San Francisco, CA, USA	NMC	C	0000	0400	0800	1200	1600	2200
Valparaiso R, CHL	CBV	B	English		0410	1210	2010	
		I	Spanish		0010	0810	1610	

Indian Ocean / Arabian Gulf / Red Sea

Dammam R, ARS	HZG	G	0100	0500	0900	1300	1700	2100
Durban R, AFS	ZSD	D	0220	0620	1020	1420	1820	2220
Jeddah R, ARS	HZH	H	0110	0510	0910	1310	1710	2110
Madras R, IND	VWM	P	0230	1030				
Manama R, BHR	A9M	B	0100	0500	0900	1300	1700	2100
Mumbai R, IND	VWB	G	0100	0500	0900	1300	1700	2100
Muscat R, OMA	A4M	M	0200	0600	1000	1400	1800	2200
Serapeum R, EGY	SUZ	N	0210	0610	1010	1410	1810	2210
		X	0350	0750	1150	1550	1950	2350

Mediterranean Sea / Black Sea

Antalya R, TUR	TAL	F	0050	0450	0850	1250	1650	2050
Batumi R, GEO	UFA	A	0418	0718	1018	1318	1618	1918
			2218					
CROSS Toulon, F		W	1140	2340				
Haifa R, ISR	4XO	P	0230	0630	1030	1430	1830	2230
Iraklion R, GRC	SVH	H	0110	0510	0910	1310	1710	2110
Istanbul R, TUR	TAH	D	0030	0430	0830	1230	1630	2030
Izmir R, TUR	TAN	I	0120	0520	0920	1320	1720	2120
Kerkyra R, GRC	SVK	K	0140	0540	0940	1340	1740	2140
Limnos R, GRC	SVL	L	0150	0550	0950	1350	1750	2150
Mariupol R, UKR	UBN	B	0500	1700				
Mariupol R, UKR	UTW	B	0218	0518	0818	1118	1418	1718
Nicosia R, CYP	5BA	M	0100	0500	0900	1300	1700	2100
Novorossiysk R, RUS	UFN	A	0300	0700	1100	1500	1900	2300
Odessa R, UKR	UTT	C	0018	0318	0618	0918	1218	1518
			1818	2118				
Odessa R, UKR	UUI	C	1030	1830	2018	2318		
Samsun R, TUR	TAF	E	0040	0440	0840	1240	1640	2140
Split R, HRV	9AS	Q	0250	0650	1050	1450	1850	2250
Tarifa R, E	EAC	G	0100	0500	0900	1300	1700	2100
Valetta R, MLT	9HD	O	0220	0620	1020	1420	1820	2220
Varna R, BUL	LZW	J	0130	0530	0930	1330	1730	2130

North Atlantic / Barents Sea / English Cannel / Irish Sea / Norwegian Sea

Arkhangelsk R, RUS	UGE	F	0200	0600	1000	1400	1800	2200
Bermuda Harbour R, BER	ZBM	B	0010	0410	0810	1210	1610	2010
Bodoe R, NOR	LGP	B	0018	0418	0900	1218	1618	2100
CCG Cartwright, NFLD, CAN	VOK	X	0350	0750	1150	1550	1950	2350
CCG Churchill, MAN, CAN	VBA	P	0230	1430				
CCG Montreal, QUE, CAN	VFN	T	French					
			0355	0755	1155	1555	1955	2355
		W	English					
			0340	0740	1140	1540	1940	2340
CCG Pass Lake, ONT, CAN		P	0230	0630	1030	1430	1830	2230
CCG Saint John's, NFLD, CAN	VON	O	1020	1820	2220			
CCG Sept Iles, QUE, CAN	VCK	C	English					
			0020	0420	0820	1220	1620	2020
		D	French					
			0035	0435	0835	1235	1635	2035
CCG Sydney, NS, CAN	VCO	Q	English					
			0240	0640	1040	1440	1840	2240
		S	French					
			0255	0655	1055	1455	1855	2255
CCG Wiarton, ONT, CAN	VBC	H	0110	0510	0910	1310	1710	2110
CCG Yarmouth, NS, CAN	VAU	V	French					
			0335	0735	1135	1535	1935	2335
		W	English					
			0320	0720	1120	1520	1920	2320
CROSS Ile d'Ouessant, F		A	0000	1200				
Finisterre R, E	EAF	D	0830	2030				
Hamilton Harbour R, BER	ZBM	B	0100	0700	1300	1900		
La Coruna R, E	EAR	D	0830	2030				
Las Palmas R, CNR	EAL	I	0120	0520	0920	1320	1720	2120
Murmansk R, RUS	UMN	C	0120	0520	0920	1320	1720	2120
Niton R, G	GNI	S	0018	0418	0818	1218	1618	2018
PN Horta, AZR	CTH	F	0050	0450	0850	1250	1650	2050
PN Lisbon, POR	CTV	R	0250	0650	1050	1450	1650	2050
Portpatrick R, G	GPK	O	0130	0530	0930	1330	1730	2130
Reykjavik R, ISL	TFA	R	0318	0718	1118	1518	1918	2318
USCG Boston, MA, USA	NMF	F	0045	0445	0845	1245	1645	2045
USCG Portsmouth, VA, USA	NMN	N	0130	0530	0930	1330	1730	2130

North Sea / Gulf of Bothnia / Gulf of Finland

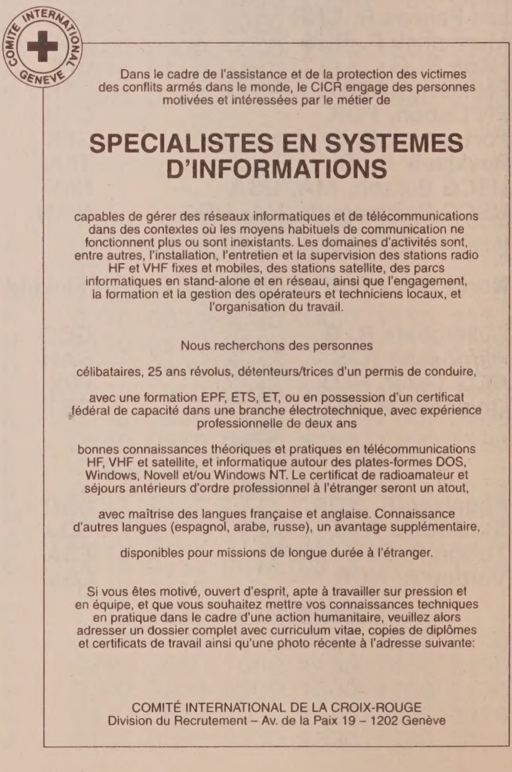
Cullercoats R, G	GCC	G	0048	0448	0848	1248	1648	2048
Härnösand R, S	SAH	H	0000	0400	0800	1200	1600	2000
NCG Texel, NLD	PBK	P	0348	0748	1148	1548	1948	2348
Oostende R, BEL	OST	M	Area Juliett			0200	0600	1000
						1400	1800	2200
		T	Coastal Waters			0248	0648	1048
						1448	1848	2248
Rogaland R, NOR	LGQ	L	0148	0548	0948	1348	1748	2148
Stockholm R, S	SDJ	U	0030	0430	0830	1230	1630	2030
Tallinn R, EST	ESA	U	0030	0430	0830	1230	1630	2030
Vardoe R, NOR	LGV	V	0300	0700	1100	1500	1900	2300

South Atlantic

Bahia Blanca R, ARG	L2I	C	0300	0900	1500	2100		
Buenos Aires R, ARG	L2G	F	0510	1110	1710	2310		
Cape Town R, AFS	ZSC	C	0020	0420	0820	1220	1620	2020
Comodoro Rivadavia R, ARG	L2W	D	0400	1000	1600	2200		
Port Elizabeth R, AFS	ZSQ	Q	0120	0520	0920	1320	1720	2120
Rio Gallegos R, ARG	L3D	E	0500	1100	1700	2300		
	L3I	B	0410	1010	1610	2210		
Rosario R, ARG		G	0010	0610	1210	1810		
Walvis Bay R, NMB	V5W	B	1210	1610				

West Pacific, Sea of Japan

Beringovskiy R, FE, RUS	UCT	E	0040	0440	0840	1240	1640	2040
Kholmsk R, FE, RUS	UFO	B	0010	0410	0810	1210	1610	2010
Kushiro R, J	JNX	K	0140	0540	0940	1340	1740	2140
Magadan R, FE, RUS	UVD	D	0030	0430	0830	1230	1630	2030
Moji R, J	JNR	H	0110	0510	0910	1310	1710	2110
Naha R, J	JNB	G	0100	0500	0900	1300	1700	2100
Otaru R, J	JNL	J	0130	0530	0930	1330	1730	2130
Petropavlovsk-K. R, FE, RUS	UBE	C	0020	0420	0820	1220	1620	2020
Provideniya R, FE, RUS	UGH	F	0050	0450	0850	1250	1650	2050
Sydney R, NSW, AUS	VIS		0240	0255	1440	1455		
USCG Apra Harbour, GUM	NRV	V	0100	0500	0900	1300	1700	
Vladivostok R, SE, RUS	UIK	A	0000	0400	0800	1200	1600	2000
Yokohama R, J	JGC	I	0120	0520	0920	1320	1720	2120



Dans le cadre de l'assistance et de la protection des victimes des conflits armés dans le monde, le CICR engage des personnes motivées et intéressées par le métier de

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avec une formation EPF, ETS, ET, ou en possession d'un certificat fédéral de capacité dans une branche électrotechnique, avec expérience professionnelle de deux ans

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Si vous êtes motivé, ouvert d'esprit, apte à travailler sur pression et en équipe, et que vous souhaitez mettre vos connaissances techniques en pratique dans le cadre d'une action humanitaire, veuillez alors adresser un dossier complet avec curriculum vitae, copies de diplômes et certificats de travail ainsi qu'une photo récente à l'adresse suivante:

COMITÉ INTERNATIONAL DE LA CROIX-ROUGE
Division du Recrutement – Av. de la Paix 19 – 1202 Genève

Latest frequencies of the Balkan War ICRC, UNO, and humanitarian agency G-TOR and PACTOR radio nets can be found in the book in hand, and nowhere else. Certain self-appointed "authors" and "experts" do not even mention PACTOR, let alone are they able to decode it ... Such vital radio nets continue to be regularly and heavily jammed by the Serbs. This magazine cutting is a recent job offer by the Geneva headquarters for qualified SITOR/PACTOR radio operators for long missions in foreign countries.

13 Q code

The QAA to QNZ series are reserved for the aeronautical service and the QOA to QQZ series are reserved for the maritime services. The series of groups QRA to QUZ are for use by all services.

Certain Q code abbreviations may be given an affirmative or negative sense by sending YES or NO respectively, immediately following the abbreviation.

The meanings assigned to Q code abbreviations may be amplified or completed by the addition of appropriate other groups, call signs, place names, figures, numbers, etc. It is optional to fill in the blanks shown in parentheses. Any data which is filled in where blanks appear shall be sent in the same order as shown in the text of the following tables.

Q code abbreviations are given the form of a question when followed by a question mark. When an abbreviation is used as a question and is followed by additional or complementary information, the question mark should follow this information.

Q code abbreviations with numbered alternative significations shall be followed by the appropriate figure to indicate the exact meaning intended. This figure shall be sent immediately following the abbreviation.

All times shall be given in Coordinated Universal Time (UTC) unless otherwise indicated in the question or reply.

In the following table, the meaning of a Q code abbreviation is given in the answer, information or advice form.

QAB	You are cleared (*or* … is cleared) by … from … (*place*) to … (*place*) at flight level/altitude …
QAF	I am (was) at (over) … (*place*) (at … hours) at flight level/altitude …
QAG	I am arranging my flight in order to arrive over … (*place*) at … hours
QAH	I am at flight level/altitude …
QAI	The essential traffic respecting your aircraft is …
QAK	There is risk of collision
QAL	I am going to land at … (*place*)
QAM	Meteorological observation made at … (*place*) at … hours was as follows
QAN	The surface wind direction and speed at … (*place*) at … hours is … (*direction*) … (*speed figures and units*)
QAO	The wind direction and speed at … (*position or zone/s)* at flight level/ altitude … is … (*vertical distance in figures and units*) … degrees true … (*speed in figures and units*)
QAP	Listen for me *(or* for …) on… kHz (… MHz)
QAQ	You are 1. near 2. flying within area … (*identification of area*)
QAR	You may stop listening on the watch frequency for … minutes
QAU	I am about to jettison fuel
QAW	I am about to carry out overshoot procedure
QAY	I passed … (*place*) bearing … degrees relative to my heading at … hours
QAZ	I am experiencing communication difficulties through flying in a storm
QBA	The horizontal visibility at … (*place*) at … hours is … (*distance figures and units*)
QBB	The amount, type and height above official aerodrome elevation of the base of the cloud at … (*place*) at … hours is … eighths (… type) at … (*figures and units*) height above official aerodrome elevation
QBC	The meteorological conditions as observed from my aircraft at … (*position or zone*) at … hours at … (*figures and units*) height above … (*datum*) are …
QBD	My fuel endurance is … (*hours and/or minutes*)
QBE	I am about to wind in my aerial

QBF	I am flying in cloud at flight level/altitude ... (and I am ascending (descending) to flight level/altitude ...)
QBG	I am flying above cloud and at flight level/altitude ...
QBH	I am flying below cloud and at flight level/altitude ...
QBI	Flight under IFR is compulsory at ... (*place*) (*or* from ... to ... (*place*))
QBJ	At ... hours at ... (*position or zone*) the top of the cloud is amount ... eighths (... type) at ... (*figures and units*) height above ... (*datum*)
QBK	I am flying with no cloud in my vicinity and at flight level/altitude ...
QBM	Here is the message sent by ... at ... hours
QBN	I am flying between two layers of cloud and at flight level/altitude ...
QBO	Flying under VFR is permissible at ... (*place*) which would be suitable for your landing
QBP	I am flying in and out of cloud and at flight level/altitude ...
QBS	Ascend (*or* descend) to ... (*figures and units*) height above ... (*datum*) before encountering instrument meteorological conditions or if visibility falls below ... (*figures and units of distance*) and advise
QBT	The runway visual range at ... (*place*) at ... hours is ... (*distance figures and units*)
QBV	I have reached flight level/altitude ... (*or* ... (*area or place*))
QBX	I have left flight level/altitude ... (*or* ... (*area or place*))
QBZ	I am reporting my flying conditions in relation to clouds
QCA	I am changing my flight level/altitude from ... to ...
QCB	Delay is being caused by 1. your transmitting out of turn 2. your slowness in answering 3. lack of your reply to my ...
QCE	Expect approach clearance at ... hours
QCF	Delay indefinite. Expect approach clearance not later than ... hours
QCH	Cleared to taxi to ... (*place*)
QCI	I am making a 360-degree turn immediately (turning to the ...)
QCS	My reception on ... frequency has broken down
QCX	My full call sign is ...
QCY	I am working on trailing aerial
QDB	I have sent message ... to ...
QDF	My D-value at ... (*position*) at ... (*figures and units*) height above the 1013.2 hectopascal datum is ... (*D-value figures and units*) ... (*specify plus or minus*)
QDL	I intend to ask you for a series of bearings
QDM	The magnetic heading for you to steer to reach me (*or* ...) with no wind was ... degrees (at ... hours)
QDP	I will accept control (*or* responsibility) of (for) ... now (*or* at ... hours)
QDR	Your magnetic bearing from me (*or* from ...) was ... degrees (at ... hours)
QDT	I am flying in visual meteorological conditions
QDU	Cancelling my IFR flight
QDV	I am flying in a flight visibility of less than ... (*figures and units*) at flight level/altitude ...
QEA	You may cross the runway ahead of you
QEB	Taxi as follows at the intersection ... (turn left *left* turn right *rite*)
QEC	You may make a 180-degree turn and return down the runway
QED	Follow the pilot vehicle
QEF	I have reached my parking area
QEG	I have left the parking area
QEH	I have moved to the holding position for runway number ...
QEJ	I am assuming take-off position for runway number ... and am holding
QEK	I am ready for immediate take-off
QEL	You are cleared to take-off (turn as follows after take-off ...)
QEM	The condition of the landing surface at ... (*place*) is ...
QEN	Hold your position
QEO	I have cleared the runway (*or* landing area)
QES	A right-hand circuit is in force at ... (*place*)
QFA	The meteorological forecast for ... (*flight, route, section of route or zone*) for the period ... hours until ... hours is ...
QFB	The 1. approach 2. runway lights are out of order 3. approach and runway

QFC	At … (*place, position or zone*) the base of the cloud is … eighths … type at … (*figures and units*) height above … (*datum*)
QFD	1. The … visual beacon (at … (*place*)) is in operation 2. I will extinguish the aerodrome visual beacon (at … (*place*)) until your landing is completed
QFE	If you set the subscale of your altimeter to read … hectopascal, the instrument would indicate its height above aerodrome elevation (above treshold, runway number …)
QFF	At … (*place*) the atmospheric pressure converted to mean sea level in accordance with meteorological practice is … (*or* was determined at … hours to be) … hectopascal
QFG	You are overhead
QFH	You may descend below the clouds
QFI	The aerodrome lights are lit
QFM	1. Maintain (*or* fly at) flight level/altitude … 2. I am maintaining flight level/altitude … 3. I intend cruising at flight level/altitude …
QFO	You may land immediately
QFP	The latest information concerning … facility (at … (*place*)) is as follows …
QFQ	The approach and runway lights are lit
QFR	Your landing gear appears damaged
QFS	The radio facility at … (*place*) is in operation (*or* will be in operation in … hours)
QFT	Ice formation has been observed at … (*position or zone*) in the type of … and with an accretion rate of … between … (*figures and units*) heights above … (*datum*)
QFU	The magnetic direction (*or* number) of the runway to be used is …
QFV	The floodlights are switched on
QFW	The length of runway … now in use is … (*figures and units*)
QFX	I am working (*or* am going to work) on a fixed aerial
QFY	The present meteorological landing conditions at … (*place*) are …
QFZ	The aerodrome meteorological forecast for … (*place*) for the period … hours until … hours is …
QGC	There are obstructions to the … of runway …
QGD	There are obstructions on your track … (*figures and units*) height above … (*datum*)
QGE	Your distance to my station (*or* to …) is … (*distance figures and units*)
QGH	You may land using … (*procedure or facility*)
QGK	I am making good a track from … (*place*) on … degrees … (*true or magnetic*)
QGL	You may enter the … (*control area or zone*) at … (*place*)
QGM	Leave the … (*control area or zone*)
QGN	You are cleared to land (at … (*place*))
QGO	Landing is prohibited at … (*place*)
QGP	You are number … to land
QGQ	Hold at … (*place*) at flight level/altitude …, and await further clearance
QGT	Fly for … minutes on a heading that will enable you to maintain a track reciprocal to your present one
QGU	Fly for … minutes on a magnetic heading of … degrees
QGV	I see you at … (*cardinal or quadrantal point of direction*) *or* I can see the aerodrome *or* I see … (aircraft)
QGW	Your landing gear appears to be down and in place
QGZ	Hold on … direction of … facility
QHE	I am on 1. cross-wind leg 2. down-wind leg 3. base leg 4. final leg of approach
QHG	Cleared to enter traffic circuit at flight level/altitude …
QHH	I am making an emergency landing
QHI	I am (*or* … is) 1. waterborne 2. on land at … hours
QHQ	I am making a … approach
QHZ	Circle the aerodrome (*or* go around)
QIC	I will establish communication with … radio station on … kHz (*or* … MHz) now (*or* at … hours)
QIF	… is using … kHz (*or* … MHz)

QJA	Your 1. tape 2. mark and space is reversed
QJB	I will use 1. radio 2. cable 3. telegraph 4. teletypewriter 5. telephone 6. receiver 7. transmitter 8. reperforator
QJC	I will check my 1. transmitter distributor 2. auto-head 3. perforator 4. reperforator 5. printer 6. printer motor 7. keyboard 8. antenna system
QJD	You are transmitting 1. in letters 2. in figures
QJE	Your frequency shift is 1. too wide 2. too narrow (by … cycles) 3. correct
QJF	My signal as checked by monitor … is satisfactory 1. locally 2. as radiated
QJG	Revert to automatic relay
QJH	Run 1. your test tape 2. a test sentence
QJI	I am transmitting a continuous 1. mark 2. space
QJK	I am receiving 1. a continuous mark 2. a continuous space 3. a mark bias 4. a space bias
QKC	The sea conditions (at … position) … 1. permit alighting but not take-off 2. render alighting extremely hazardous
QKF	You may expect to be relieved at … hours (by 1. aircraft … (*identification*) (type …) 2. vessel whose call sign is … (*call sign*) (*and/or* whose name is … (*name*))
QKG	Relief will take place when … (*identification*) establishes 1. visual 2. communications contact with survivors
QKH	The parallel sweep (track) search is being (*or* to be) conducted 1. with direction of sweeps … degrees … (*true or magnetic*) 2. with … (*distance figures and units*) separation between sweeps 3. at flight level/altitude …
QKN	Aircraft plotted (believed to be you) in position … on track … degrees at … hours
QKO	In the operation (… (*identification*)), the following units are (*or* will be) taking part … (*name of units*)
QKP	The search pattern is 1. parallel sweep 2. square search 3. creeping line ahead 4. track crawl 5. contour search 6. combined search by aircraft and ship 7. … (*specify*)
QLB	I have monitored … station and report (*briefly*) as follows …
QLH	I will know key simultaneously on … frequency and … frequency
QLV	The … radio facility is still required

QMH	Shift to transmit and receive on … kHz (*or* … MHz); if communication is not established within 5 minutes, revert to present frequency
QMI	The vertical distribution of cloud as observed from my aircraft at … hours at … (*position or zone*) is: lowest layer observed … eighths (… type) with base of … (*figures and units*) and tops of … (*figures and units*) height above … (*datum*)
QMU	The surface temperature at … (*place*) at … hours is … degrees and the dew point temperature at that time and place is … degrees
QMW	At … (*position or zone*) the zero Celsius isotherm(s) is (are) at flight level(s)/altitude(s) …
QMX	At … (*position or zone*) at … hours the air temperature is … (*degrees and units*) at flight level/altitude …
QMZ	The following amendment(s) should be made to the flight forecast …
QNE	On landing at … (*place*) at … hours, with your subscale being set to 1013.2 hectopascal, your altimeter will indicate … (*figures and units*)
QNH	If you set the subscale of your altimeter to read … hectopascal, the instrument would indicate its elevation if your aircraft were on the ground at my station at … hours
QNI	Turbulence has been observed at … (*position or zone*) with an intensity of … between … (*figures and units*) and … (*figures and units*) heights above … (*datum*)
QNO	I am not equipped to give the information (*or* provide the facility) requested
QNR	I am approaching my point of no return
QNT	The maximum speed of the surface wind at … (*place*) at … hours is … (*speed figures and units*)
QNY	The present weather and intensity thereof at … (*place, position or zone*) at … hours is …
QOA	I can communicate by radiotelegraphy (500 kHz)
QOB	I can communicate by radiotelephony (2182 kHz)
QOC	I can communicate by radiotelephony (channel 16 - frequency 156.80 MHz)
QOD	I can communicate with you in 0. Dutch 1. English 2. French 3. German 4. Greek 5. Italian 6. Japanese 7. Norwegian 8. Russian 9. Spanish
QOE	I have received the safety signal sent by … (*name and/or call sign*)
QOF	The quality of your signal is 1. not commercial 2. marginally commercial 3. commercial
QOG	I have … tapes to send
QOH	Send a phasing signal for … seconds
QOI	Send your tape
QOJ	I am listening on … kHz (*or* … MHz) for signals of emergency position-indicating radiobeacons
QOK	I have received the signals of an emergency position-indicating radiobeacon on … kHz (*or* … MHz)
QOL	My vessel is fitted for the reception of selective calls. My selective call number or signal is …
QOM	My vessel can be reached by a selective call on the following frequency/ies … (*periods of time to be added if necessary*)
QOO	I can send on any working frequency
QOT	I hear your call; the approximate delay is … minutes
QRA	The name of my station is …
QRB	The approximate distance between our stations is … nautical miles (*or* … kilometres)
QRC	The accounts for charges of my station are settled by the private enterprise … (*or* state administration)
QRD	I am bound for … from …
QRE	My estimated time of arrival at … (*or* over …) (*place*) is … hours
QRF	I am returning to … (*place*)
QRG	Your exact frequency (*or* that of …) is … kHz (*or* … MHz)

QRH	Your frequency varies
QRI	The tone of your transmission is 1. good 2. variable 3. bad
QRJ	I have … radiotelephone calls to book
QRK	The intelligibility of your signals (*or* those of …) is 1. bad 2. poor 3. fair 4. good 5. excellent
QRL	I am busy (*or* I am busy with …). Please do not interfere
QRM	I am being interfered with (1. nil 2. slightly 3. moderately 4. severely 5. extremely)
QRN	I am troubled by static (1. nil 2. slightly 3. moderately 4. severely 5. extremely)
QRO	Increase transmitter power
QRP	Decrease transmitter power
QRQ	Send faster (… words per minute)
QRR	I am ready for automatic operation. Send at … words per minute
QRS	Send more slowly (… words per minute)
QRT	Stop sending
QRU	I have nothing for you
QRV	I am ready
QRW	Please inform … that I am calling him on … kHz (*or* … MHz)
QRX	I will call you again at … hours (on … kHz (*or* … MHz))
QRY	Your turn is number … (*or according to any other indication*)
QRZ	You are being called by … (on … kHz (*or* … MHz))
QSA	The strength of your signal (*or* those of …) is 1. scarcely perceptible 2. weak 3. fairly good 4. good 5. very good
QSB	Your signals are fading
QSC	I am a cargo vessel
QSD	Your keying is defective
QSE	The estimated drift of the survival craft is … (*figures and units*)
QSF	I have effected rescue and am proceeding to … base (with … persons injured requiring ambulance)
QSG	Send … telegrams at a time
QSH	I am able to home on my D/F equipment (on station …)
QSI	I have been unable to break in on your transmission
QSJ	The charge to be collected to … including my internal charge is … francs
QSK	I can hear you between my signals; break in on my transmission
QSL	I am acknowledging receipt
QSM	Repeat the last telegram which you sent me (*or* telegram(s) number(s) …)
QSN	I did hear you (*or* … (*call sign*)) on … kHz (*or* … MHz)
QSO	I can communicate with … direct (*or* by relay through …)
QSP	I will relay to … free of charge
QSQ	I have a doctor on board (*or* … (*name of person*) is on board)
QSR	Repeat your call on the calling frequency; did not hear you (*or* have interference)
QSS	I will use the working frequency … kHz (*normally only the last three figures of the frequency need be given*)
QSU	Send or reply on this frequency (*or* on … kHz (*or* … MHz)) (with emissions of class …)
QSV	Send a series of Vs on this frequency (*or* … kHz (*or* … MHz))

QSW	I am going to send on this frequency (*or* on … kHz (*or* … MHz)) (with emissions of class …)
QSX	I am listening to … (*call sign(s)* on … kHz (*or* … MHz))
QSY	Change to transmission on another frequency (*or* on … kHz (*or* … MHz))
QSZ	Send each word or group twice (*or* … times)
QTA	Cancel telegram number …
QTB	I do not agree with your counting of words; I will repeat the first letter or digit of each word or group
QTC	I have … telegrams for your (*or* for …)
QTD	… (*identification*) has recovered 1. … (*number*) survivors 2. wreckage 3. … (*number*) bodies
QTE	Your true bearing from me is … degrees at … hours
QTF	The position of your station according to the bearings taken by the D/F stations which I control was … latitude, … longitude (*or other indication of position*), class … at … hours
QTG	I am going to send two dashes of ten seconds each followed by my call sign (repeated … times) (on … kHz (*or* … MHz))
QTH	My position is … latitude, … longitude (*or according to any other indication*)
QTI	My true track is … degrees
QTJ	My speed is … knots (*or* … kilometres per hour *or* … statute miles per hour)
QTK	The speed of my aircraft in relation to the surface of the Earth is … knots (*or* … kilometres per hour *or* … statute miles per hour)
QTL	My true heading is … degrees
QTM	My magnetic heading is … degrees
QTN	I departed from … (*place*) at … hours
QTO	I have left dock (*or* port) *or* I am airborne
QTP	I am going to enter dock (*or* port) *or* I am going to alight (*or* land)
QTQ	I am going to communicate with your station by means of the International Code of Signals
QTR	The correct time is … hours
QTS	I will send my call sign for tuning purposes or so that my frequency may be measured now (*or* at … hours) on … kHz (*or* … MHz)
QTT	The identification signal which follows is superimposed to another transmission
QTU	My station is open from … to … hours
QTV	Stand guard for me on the frequency of … kHz (*or* … MHz) (from … to … hours)
QTW	Survivors are in … condition and urgently need …
QTX	I will keep my station open for further communication with you until further notice (*or* until … hours)
QTY	I am proceeding to the position of incident and expect to arrive at … hours (on … (*date*))
QTZ	I am continuing the search for … (aircraft, ship, survival craft, survivors or wreckage)
QUA	Here is news of … (*call sign*)
QUB	Here is the information requested: …
QUC	The number (*or other indication*) of the last message I received from you (*or* from … (*call sign*)) is …
QUD	I have received the urgency signal sent by … (*call sign of mobile station*) at … hours
QUE	I can use telephony in … (*language*) on … kHz (or … MHz)
QUF	I have received the distress signal sent by … (*call sign of mobile station*) at … hours
QUG	I am forced to alight (*or* land) immediately
QUH	The present barometric pressure at sea level is … (*units*)
QUI	My navigation lights are working
QUJ	The true track to reach me (*or* …) is … degrees at … hours
QUK	The sea at … (*place or coordinates*) is …
QUL	The swell at … (*place or coordinates*) is …
QUM	Normal working may be resumed
QUN	My position, true course and speed are …
QUO	Please search for 1. aircraft 2. ship 3. survival craft in the vicinity of … latitude, … longitude (*or according to any other indication*)

QUP	My position is indicated by 1. searchlight 2. black smoke trail 3. pyrotechnic lights
QUQ	Please train your searchlight on a cloud, occulting if possible and, if my aircraft is seen or heard, deflect the beam up wind and on the water (*or* land) to facilitate my landing
QUR	Survivors 1. are in possession of survival equipment dropped by ... 2. have been picked up by rescue vessel 3. have been reached by ground rescue party
QUS	Have sighted 1. survivors in water 2. survivors on rafts 3. wreckage in position ... latitude, ... longitude (*or according to any other indication*)
QUT	Position of incident is marked by 1. flame or smoke float 2. sea marker 3. sea marker dyce 4. ... (*specify other marking*)
QUU	Home ship or aircraft ... (*call sign*) 1. to your position by transmitting your call sign and long dashes on ... kHz (*or* ... MHz) 2. by transmitting on ... kHz (*or* ... MHz) true track to reach you
QUW	I am in the ... (*designation*) search area
QUX	I have the following navigational warning(s) or gale warning(s) in force: ...
QUY	Position of survival craft was marked at ... hours by 1. flame or smoke float 2. sea marker 3. sea marker dyce 4. ... (*specify other marking*)
QUZ	Distress phase still in force; restricted working may be resumed ☺

Öffentliche Ausschreibung nach der VOL/A des Presse- und Informationsamtes der Bundesregierung Referat Nachrichtentechnik, 53105 Bonn

Gegenstand der Ausschreibung:

Entwicklung und Herstellung von 8 Funkfernschreib-Konvertern als Ersatz für veraltete Konverter der Fa. HAL Communications Corp., Type DS-3000 RO. Die Konverter können auch teilweise aus Baugruppen zusammengesetzt sein, die im Fachhandel erworben wurden.

Ort der Leistung/Empfangs- bzw. Montagestelle:

Funkempfangsstelle Ersdorf (ca. 20 km von Bonn entfernt).

Interessenten werden gebeten, die Verdingungsunterlagen bis zum **12. April 1996** bei der ausschreibenden Stelle schriftlich anzufordern.

Die Angebotsfrist endet mit Ablauf des **3. Mai 1996.**

Der Zuschlag wird bis spätestens zum **20. Mai 1996** erteilt, bis dahin ist der Bieter an sein Angebot gebunden.

Für alle Termine gilt das Datum des Eingangs im Presse- und Informationsamt der Bundesregierung.

Dem Angebot sind Unterlagen beizufügen, aus denen der Nachweis über vergleichbare Anwendungslösungen (Referenzliste) ersichtlich wird.

Mit der Abgabe des Angebotes unterliegt der Bewerber den Bestimmungen über nicht berücksichtigte Angebote gemäß § 27 VOL/A.

Weitere Angaben ergeben sich aus den Verdingungsunterlagen. Für Rückfragen steht Ihnen Herr Schenk, Telefon (02 28) 2 08 - 25 32, zur Verfügung.

So that ill-reputed governmental public opinion manipulation department finally decided to upgrade its hopeless old-fashioned equipment ... It will certainly not help them win the media war!

14 Z code

This code, formerly developed as a service code of Cable & Wireless Ltd, is used nowadays for overall ratings in radiotelegraphy and radiotelephony.

In the following table, the meaning of a Z code abbreviation is given in the answer, information or advice form, if different forms exist. Z codes printed *in italics* indicate military usage. When numbers 1-5 follow the Z code abbreviation, they are to be keyed according to the following scale:

1. Very slight
2. Slight
3. Moderate
4. Severe
5. Extreme

ZAA	You are not observing circuit discipline	
ZAB	Your speed key is improperly adjusted	
ZAC	Advise (*call sign of*) the frequency you are reading … running dual for you	
ZAC	Cease using speed key	
ZAD	Signal	1. not understood 2. not held
ZAE	Unable to receive you, try via …	
ZAF	Reroute the circuit by patching	
ZAH	Unable to relay, we file	
ZAI	Run (*foxes, ry's, mk, etc.*)	
ZAJ	Have been unable to break you	
ZAK	Transmission interrupted at … hours	
ZAL	Alter your wavelength	
ZAL	Closing down due to …	
ZAN	We can receive absolutely nothing	
ZAN	Only transmit telegrams with precedence … (Z, Y, O, P, R, M) or higher	
ZAO	Can't understand voice, use telegraphy	
ZAP	Acknowledge, please	
ZAP	Use traffic	1. simplex 2. duplex 3. diplex 4. multiplex 5. SSB ISB
ZAQ	The last word	1. I received 2. transmitted was …
ZAR	Revert to automatic relay	
ZAS	Rerun tapes on … since …	
ZAT	Punching tape for transmission	
ZAV	Send blind until advised	
ZAX	You are causing interference	1. listen before transmitting 2. by ignoring my wait signal 3. by transmitting simultaneously with … 4. by answering too slowly 5. by answering too slowly my call to you. You're causing a delay 6. by not answering on your turn
ZAY	Send on … kHz. Will confirm later	
ZBA	Cause of delay is …	
ZBB	Make … copies of the following message	
ZBD	Following was sent … hours	

ZBE	Retransmit message … to … for 1. action 2. information 3. comment
ZBF	Use large message formula for the following telegram
ZBG	You are sending upper case
ZBH	Make call before transmitting traffic
ZBI	Listen for telephony
ZBL	Do not use break-in
ZBM	Put … (*speed opr.*) this frequency
ZBN	Break and go ahead with new slip
ZBN	Your tape reversed
ZBO	I have traffic
ZBP	1. Characters indistinct 2. Spacing bad
ZBQ	When and on what frequency was message received ?
ZBR	Break circuit, retuning
ZBR	Transmit your message via the 1. R (receipt) 2. F (not answer) 3. I (interruption) method 4. G (read back)
ZBS	Your signals blurring
ZBT	Count … as … groups
ZBU	Report when in communication with …
ZBV	Answer on … MHz
ZBW	I (*or* station …) changes for transmission on … kHz
ZBX	I (*or* station …) changes for reception to … kHz
ZBY	Break, go back yard (*or* metre)
ZCA	Circuit seriously affected. All signals or channels from … unreadable. Please try to supply us with a readable signal or any frequency of that circuit for contact
ZCB	Circuit interrupted (*or* broken). Signals unheard. Please cover and supply any … heard
ZCC	Collate code
ZCD	Your collation is different
ZCF	Check your center frequency, please
ZCI	Circuit interrupted. We are advised that … running and available. Please cover also and supply the signal which first becomes usable.
ZCK	Check keying
ZCL	Transmit call letters intelligibly (international morse code, at speed not exceeding 24 words per minute, or by voice) for station identification
ZCO	Your collation omitted
ZCP	Local receiving conditions poor; please increase to maximum
ZCR	Now using concentrator. Please make warning signals
ZCS	Cease sending
ZCT	Send code twice
ZCW	Are you in direct communication with … ?
ZDA	Here formal message, priority …
ZDB	Accelerate answering my 1. preceded Z code 2. requests for repeat and correction 3. signal serving message
ZDC	We are diagnosing circuit faults, and will advise shortly
ZDC	Last message transmitted requests execution signal
ZDE	Message undelivered; 1. will keep trying 2. advise disposal 3. cancelling 4. btr ads
ZDE	Message … undelivered
ZDF	Your frequency is drifting to degree indicated
ZDF	Message … received by addressee
ZDG	Accuracy of following doubtful
ZDH	Your dots are too heavy (long), adjust lighter
ZDJ	I have a message of … groups for you

ZDK	The following is a repeat as requested
ZDL	Your dots are too light (short), adjust heavier
ZDL	Approval 1. is omitted 2. differs in its contents
ZDM	Your dots missing
ZDM	This is a multiple-addressee message
ZDN	Report disposal of message …
ZDO	I have been unable to transmit the message to …
ZDQ	Message … relayed to … at …
ZDS	Message just transmitted erroneous. Correct version is …
ZDT	Following transmitters running dual
ZDT	Don't transmit exercise messages until advised
ZDV	Your dots varying length, please remedy
ZDV	Private message received for …, advise
ZDY	No private messages until ordered
ZEC	Message 1. not received 2. undelivrable
ZED	We are experiencing drop-outs to degree indicated
ZEF	We are experiencing fill-ins to degree indicated
ZEG	We are experiencing garbles to degree indicated
ZEH	1. Correctness of service part 2. Text parts is doubtful. Approval will be given after receipt 3. Groups … till …
ZEI	Accuracy of heading doubtful
ZEK	No answer required
ZEL	This message is correction to …
ZEN	Drop copy to unit having same routing indicator as originator
ZEN	This message is classified
ZEO	Parts marked ZEP coming later
ZES	Your message … received 1. not complete, 2. distorted, I request retransmission
ZEU	Exercise (drill message) coming now
ZEV	This is an acknowledgement of message …
ZEX	This is a booking message, it may be delivered to addressees for who you are responsable
ZFA	Failing auto
ZFA	Message intercepted or copied blind
ZFB	Signals are fading badly
ZFB	Pass this message to …
ZFC	Check your FSK shift, please
ZFD	Depth of fading of your signal is as indicated
ZFD	This message is a suspected duplicate
ZFF	Please observe and furnish FRAME code reports on … (*call letters and frequency in khz*)
ZFF	Advise when message received by …
ZFH	Message by … for 1. action 2. information 3. comment
ZFI	Reply to message? There is no reply
ZFK	Revert to FSK
ZFL	The following … was addressed to you between serial number … and … of this network
ZFO	Signals faded out
ZFQ	Frequency shift of your signal is … Hz
ZFR	Rapidity of fading of your signal is as indicated
ZFR	Cancel transmission
ZFS	Signals are fading slightly
ZGA	The call sign assigned to you is …
ZGB	Answer in alphabetical numerical order
ZGC	Answer in alphabetical numerical order and transmit your call sign … times
ZGE	Transmit your call sign … times
ZGF	… signals good for … words per minute
ZGF	Make call signs more distinctly

ZGG	Call sign of ... is ...
ZGI	... has called you on ... kHz
ZGJ	I'l call you back at ... hours on ... kHz
ZGK	Call me back at ... hours on ... kHz
ZGL	... will answer for me or for ...
ZGM	I was not able to contact you since ... hours
ZGN	Nothing was heard from you since ... hours
ZGO	Your number is ..., answer after ...
ZGP	Please give priority
ZGP	Answer each station calling me on ... kHz
ZGS	Your signals getting stronger
ZGW	Your signals getting weaker
ZHA	How are your conditions for auto reception?
ZHA	Lower your frequency to avoid interference
ZHB	Raise your frequency to avoid interference
ZHC	How are your receiving conditions?
ZHM	Indicating reception of harmonic radiation from some transmitter, followed by indication of the order of the harmonic followed by the microvolt input to receiver of the radiation
ZHS	Send high speed auto ... words per minute
ZHY	We are holding your ...
ZIA	This message is sent outside the normal serial numbers
ZIB	Correct serial number of message ...
ZIC	The last message sent by me was ...
ZII	The last message received by me was ...
ZIM	Interruption caused by industrial or medical interference of the degree indicated
ZIP	Increase power
ZIP	Postal address is ...
ZIR	Your transmitter has strong idle radiation
ZIS	Intensity of atmospheric interference on ... of severity indicated
ZJF	Your frequency is jumping to degree indicated
ZJJ	Wire via the double-flash method
ZJO	Compare each group of text
ZKA	Who is controlling station?
ZKB	Permission necessary before transmitting messages
ZKC	Replace this Z code by the call sign or code name of the control station
ZKD	Take control of net ...
ZKE	I (*or* ...) report(s) into circuit (net)
ZKF	Station leaves net temporarily
ZKI	Listen on ... kHz 1. continuously 2. till new order
ZKJ	1. Close your station 2. I close my station until ... hours
ZKL	Resume radio watch on ... hours
ZKM	Keep radio watch on ... kHz
ZKO	Revert to on/off keying
ZKP	... has radio watch for station ... on ... kHz
ZKQ	Say when ready to resume
ZKR	I am maintaining a watch on ... kHz (*or* ... MHz)
ZKS	What station keeps watch on ...?
ZKW	The key weight of your signal is ... (*expressed in %*)
ZLB	Give long breaks, please
ZLD	We are getting long dash from you
ZLL	Distorted landline control signals apparently caused by control wire pickup
ZLP	Low (minimum) power
ZLS	We are suffering from a lightning storm
ZMH	Magnetic activity
ZMO	Stand by a moment
ZMP	Mispunch *or* perforator failures
ZMQ	Stand by for ...

ZMU	Multipath effect causing … signals to appear heavy. (*followed by indication of percentage of marking if able to estimate*)
ZNB	We do not get your breaks, we send twice
ZNC	No communication with …
ZNC	All transmissions on 1. all radionets 2. this radionet must be confirmed 3. …
ZND	Your certification is incorrect; 1. verify your code book 2. check confirmation of last message
ZNE	The last transmission on this radionet 1. … 2. by station … was authentic
ZNG	Receiving conditions no good for code
ZNI	No call letters (identification) heard
ZNJ	Message may be forwarded by radio or unsafe liaisons
ZNL	Questions concerning the text of this message must be directed to the encoding officer of station …
ZNM	Check the encoding message and repeat
ZNN	All clear for traffic
ZNO	Not on the air
ZNR	Not received
ZNS	Here new slip
ZOA	We chave checked … (*transmitter call sign*) signals are radiating on air okay
ZOC	Relay to your sub-stations
ZOD	We are observing … and will make transition when as good or better
ZOD	Act as a radio link between me and …
ZOE	Can you accept message? Give me message
ZOF	Relay this message
ZOG	Transmit this message to station … 1. for action 2. for information
ZOH	What traffic have you on hand?
ZOH	Transmit this message to … on … kHz via the … method
ZOJ	I can't forward this message because 1. the call sign of the code name is not encoded 2. the contents are not encoded
ZOK	We are receiving okay
ZOK	Relay this message via …
ZOL	Okay on line
ZOM	Mail delivery possible
ZOR	Transmit only reversals
ZOU	Give instructions on routing traffic
ZOZ	Obtain retransmission of message …
ZPA	Printer line advance (feed) not received
ZPA	Your speech distorted
ZPC	Printer carriage return not received
ZPC	Signals fading to degree indicated
ZPE	Punch everything
ZPE	I transmit with maximum power
ZPF	Printer motor fast
ZPF	Readibility is as indicated
ZPG	Signal strength is as indicated
ZPO	Send plain once
ZPP	Punch plain only
ZPR	Re-run slip at present running
ZPS	Printer motor slow
ZPT	Send plain twice
ZRA	Reversed auto tape
ZRA	Your frequency is 1. correct 2. … kHz higher 3. … kHz lower
ZRB	Your relayed signal is bad; please adjust your received signal
ZRB	Check your frequency on this circuit

ZRC	Can you receive code?
ZRC	Adjust your frequency on the 1. correct frequency 2. frequency of my transmitter
ZRE	Hear you best on ... kHz
ZRF	Send tuning signals on present frequency
ZRG	Changing frequency will be necessary on ... hours
ZRK	Reversed keying
ZRL	Re-run slip before one now running
ZRM	Please remove modulation from ...
ZRM	I receive ... (USB, LSB, ISBs)
ZRN	Rough note
ZRO	Are you receiving okay?
ZRR	Run reversals
ZRS	Re-run message number ... (*or* slip containing message number ...)
ZRT	Revert to traffic
ZRY	Run test slip, please
ZSF	Send faster
ZSH	Static heavy here
ZSI	Please furnish signal intensity of ... (*microvolts input to receiver*)
ZSM	Microvolt input to receiver is ...
ZSN	Please observe and furnish SINPO code reports on ... (*call letters and frequency in kHz*)
ZSO	Transmit slips once
ZSR	Your signals strong readable
ZSS	Send slower
ZST	Transmit slips twice
ZSU	Your signals are unreadable
ZSV	Your speed varying
ZTA	Transmit by auto
ZTD	Please use ...
ZTE	I am not able to use ...
ZTG	1. radiotelegraphy 2. modulated radiotelegraphy 3. radiotelephony transmission 4. radioteletype 5. radiobearing
ZTH	Transmit by hand
ZTH	1. FM 2. AM 3. PM transmission 4. FSK 5. AJ
ZTI	Transmitter temporarily interrupted
ZTI	1. Receiver 2. Transmitter 3. Power supply 4. Antenna system
ZTJ	Stop using ...
ZUA	Our conditions unsuitable for undulator or automatic recording
ZUA	Timing signal will be transmitted
ZUB	We have been unable to break you
ZUB	At ... hours
ZUC	Unable to comply. Will do so at ...
ZUE	Affirmative (yes)
ZUG	Negative (no)
ZUH	Unable to comply
ZUI	Your attention is drawn to ...
ZUJ	Wait. Stand by
ZUK	... is ready for keying with ...
ZVB	Varying bias
ZVF	Signals varying in frequency

ZVP	Send V's please
ZVR	Pass at once to sub-stations
ZVS	Signals varying in intensity
ZWB	Name of operator on watch
ZWC	Wipers or clicks here
ZWF	Inexact
ZWG	Correct
ZWL	Except ...
ZWO	Send words once
ZWR	Your signal weak but readable
ZWS	Wavelength (frequency) is swinging to degree indicated
ZWT	Send words twice
ZXA	We are adjusting (*or* please adjust) to receive speeds ...
ZXC	Pictures ... conditionally accepted. Will advise
ZXD	Send dashes, please
ZXF	You are floating fast
ZXH	Your limits are high. Please reduce ... Hz
ZXJ	You are jumping out of phase
ZXK	Is your synchronizing correct?
ZXL	Your limits are low. Please increase ... Hz
ZXO	Last run defaced due to ...
ZXP	Go ahead with pictures
ZXS	You are floating slow
ZXV	Your modulation is varying
ZYA	Cease traffic on all channels; send A's on A channel for lineup
ZYC	Cycling on automatic error correction with 7-unit errors stored at your end
ZYK	Your keying on ... channel affected; please check
ZYN	Reduce the bias
ZYO	Message originated with mobile units
ZYP	Change from multiplex to single printer
ZYR	Please put ... on multiplex revolutions
ZYS	The speed of transmission is ...
ZYT	Check your thyratrons
ZYT	Forward this message without service action
ZYX	Please revert to multiplex revolutions ... channels
ZZA	Tell name of operator who has transmitted last message (*or* message ...)
ZZF	Incorrect
ZZG	Correct
ZZH	Try again
ZZN	Message is a drill message for 1. beginning operators 2. advanced operators 3. operators on watch
ZZO	Beginning operator ☺

15 Phonetic alphabet and figure code

When it is necessary to spell out call signs, service abbreviations and words, the following letter spelling table shall be used:

letter to be transmitted	code word to be used	spoken as[1]
A	Alfa	AL fah
B	Bravo	BRAH voh
C	Charlie	CHAR lee / SHAR lee
D	Delta	DELL tah
E	Echo	ECK oh
F	Foxtrott	FOKS trot
G	Golf	golf
H	Hotel	hoh TELL
I	India	IN dee ah
J	Juliett	JEW lee ETT
K	Kilo	KEY loh
L	Lima	LEE mah
M	Mike	mike
N	November	no VEM ber
O	Oscar	OSS cah
P	Papa	pah PAH
Q	Quebec	keh BECK
R	Romeo	ROW me oh
S	Sierra	see AIR rah
T	Tango	TANG go
U	Uniform	YOU nee form / OO nee form
V	Victor	VIK tah
W	Whiskey	WISS key
X	X-ray	ECKS RAY
Y	Yankee	YANG key
Z	Zulu	ZOO loo

[1] The syllables to be emphasized are written in capitals

When it is necessary to spell out figures or marks, the following table shall be used:

figure or mark to be transmitted	code word to be used	spoken as[2]
0	Nadazero	nah-dah-zay-roh
1	Unaone	oo-nah-wun
2	Bissotwo	bees-soh-too
3	Terrathree	tay-rah-tree
4	Kartefour	kar-tay-fower
5	Pantafive	pan-tah-five
6	Soxisix	sok-see-six
7	Setteseven	say-tay-seven
8	Oktoeight	ok-toh-ait
9	Novenine	no-vay-niner
decimal point	Decimal	day-see-mal
full stop	Stop	stop

[2] Each syllable should be equally emphasized

However, stations of the same country, when communicating between themselves, may use any other table recognized by their administration. ☺

16 SINPO and SINPFEMO codes

SINPO signal reporting code

	S	I	N	P	O
		degrading effect of			
rating scale	signal strength	inter-ference	noise	propaga-tion dis-turbance	overall rating
5	excellent	nil	nil	nil	excellent
4	good	slight	slight	slight	good
3	fair	moderate	moderate	moderate	fair
2	poor	severe	severe	severe	poor
1	barely audible	extreme	extreme	extreme	unusable

SINPFEMO signal reporting code

	S	I	N	P	F	E	M	O
		degrading effect of				modulation		
rating scale	signal strength	inter-ference	noise	propaga-tion dis-turbance	frequency of fading	quality	depth	overall rating
5	excellent	nil	nil	nil	nil	excellent	maximum	excellent
4	good	slight	slight	slight	slow	good	good	good
3	fair	moderate	moderate	moderate	fair	fair	fair	fair
2	poor	severe	severe	severe	fast	poor	poor or nil	poor
1	barely audible	extreme	extreme	extreme	very fast	very poor	conti-nuously overmo-dulated	unusable

Special remarks:

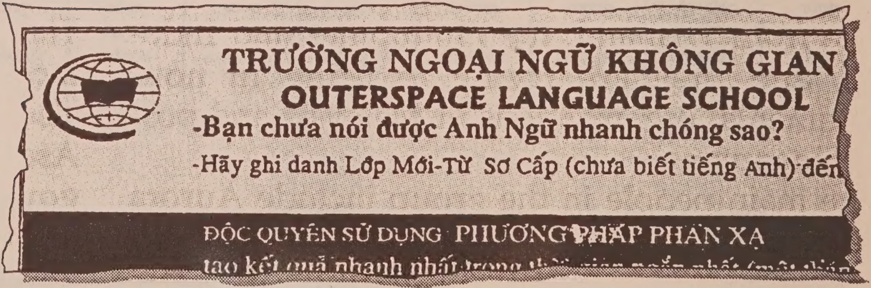
- A signal report shall consist of the code word SINPO or SINPFEMO followed by a group of five or eight numerals, rating, respectively, the five or eight characteristics of the particular signal code.
- The letter **X** shall be used instead of a numeral for characteristics not rated.
- Although the code word SINPFEMO is intended for radiotelephony, it may be used for radiotelegraphy.
- The overall rating for radiotelegraphy shall be as indicated in Tables I and II:

Table I	overall rating		mechanized operations
	5	excellent	4-channel time-division multiplex
	4	good	2-channel time-division multiplex
	3	fair	marginal single start-stop printer
	2	poor	BKs, XQs and call signs readable
	1	unusable	unreadable

Table II	overall rating		morse operation
	5	excellent	high speed
	4	good	100 wpm
	3	fair	50 wpm
	2	poor	BKs, XQs and call signs readable
	1	unusable	unreadable

- The overall rating for telephony shall be as indicated in Table III:

Table III	overall rating		operating condition	quality
	5	excellent	signal quality unaffected	commercial
	4	good	signal quality slightly affected	commercial
	3	fair	signal quality seriously affected; channel usable by operators or by experienced subscribers	marginally commercial
	2	poor	channel just usable by operators	not commercial
	1	unusable	channel unusable by operators	not commercial ☺



TRƯỜNG NGOẠI NGỮ KHÔNG GIAN
OUTERSPACE LANGUAGE SCHOOL
-Bạn chưa nói được Anh Ngữ nhanh chóng sao?
-Hãy ghi danh Lớp Mới-Từ Sơ Cấp (chưa biết tiếng Anh) đến
ĐỘC QUYỀN SỬ DỤNG PHƯƠNG PHÁP PHẢN XẠ
tạo kết quả nhanh nhất

Why bother learning old English? Something more exotic can be studied in Ho Chi Minh City!

17 Designation of emissions

RR 264 Emissions shall be designated according to their necessary bandwidth and their classification.

RR 265 Examples of emissions designated in accordance with this Article are given in Appendix 6, Part B. Further examples may appear in the latest CCIR Recommendations. These examples may also be published in the Preface to the International Frequency List.

Section I - Necessary bandwidth

RR 266 The necessary bandwidth, as defined in RR 146 and determined in accordance with Appendix 6, Part B, shall be expressed by three numerals and one letter. The letter occupies the position of the decimal point and represents the unit of bandwidth. The first character shall be neither zero nor K, M or G.

RR 267 Necessary bandwidths:
between 0.001 and 999 Hz shall be expressed in Hz (letter H);
between 1.00 and 999 kHz shall be expressed in kHz (letter K);
between 1.00 and 999 MHz shall be expressed in MHz (letter M);
between 1.00 and 999 GHz shall be expressed in GHz (letter G).

Examples:
0.002 Hz = H002
0.1 Hz = H100
25.3 Hz = 25H3
400 Hz = 400H
2.4 kHz = 2K40
6 kHz = 6K00
12.5 kHz = 12K5
180.4 kHz = 180K
180.5 kHz = 181K
180.7 kHz = 181K
1.25 MHz = 1M25
2 MHz = 2M00
10 MHz = 10M0
202 MHz = 202M
5.65 GHz = 5G65

Section II - Classification

RR 268 The class of emission is a set of characteristics conforming to RR 269.

RR 269 Emissions shall be classified and symbolized according to their basic characteristics as given in RR 270 and any optional additional characteristics as provided for in Appendix 6, Part A.

RR 270 The basic characteristics (see RRs 271, 272, 273) are:
(1) first symbol - type of modulation of the main carrier;
(2) second symbol - nature of signal(s) modulating the main carrier;
(3) third symbol - type of information to be transmitted.
Modulation used only for short periods and for incidental purposes (such as, in many cases, for identification and calling) may be ignored provided that the necessary bandwidth as indicated is not thereby increased.

RR 271 **First symbol - type of modulation of the main carrier**

Emission of an unmodulated carrier	N
Emission in which the main carrier is amplitude-modulated (including cases where sub-carriers are angle-modulated)	
• Double-sideband	A
• Single-sideband, full carrier	H
• Single-sideband, reduced or variable level carrier	R
• Single-sideband, suppressed carrier	J
• Independent sidebands	B
• Vestigial sideband	C
Emission in which the main carrier is angle-modulated	
• Frequency modulation	F
• Phase modulation	G
Emission in which the main carrier is amplitude- and angle-modulated either simultaneously or in a pre-established sequence	D

	Emission of pulses (emissions where the main carrier is directly modulated by a signal which has been coded into quantized form (e.g. pulse code modulation) should be designated under amplitude modulation or angle modulation above)	
	• Sequence of unmodulated pulses	P
	A sequence of pulses	
	• modulated in amplitude	K
	• modulated in width/duration	L
	• modulated in position/phase	M
	• in which the carrier is angle-modulated during the period of the pulse	Q
	• which is a combination of the foregoing or is produced by other means	V
	Cases not covered above, in which an emission consists of the main carrier modulated, either simultaneously or in a pre-established sequence, in a combination of two or more of the following modes: amplitude, angle, pulse	W
	Cases not otherwise covered	X
RR 272	**Second symbol - nature of signal(s) modulating the main carrier**	
	No modulating signal	0
	A single channel containing quantized or digital information without the use of a modulating sub-carrier (this excludes time-division multiplex)	1
	A single channel containing quantized or digital information with the use of a modulating sub-carrier (this excludes time-division multiplex)	2
	A single channel containing analogue information	3
	Two or more channels containing quantized or digital information	7
	Two or more channels containing analogue information	8
	Composite system with one or more channels containing quantized or digital information, together with one or more channels containing analogue information	9
	Cases not otherwise covered	X
RR 273	**Third symbol - type of information to be transmitted** (in this context the word "information" does not include information of a constant, unvarying nature such as is provided by standard frequency emissions, continuous wave and pulse radars, etc.)	
	No information transmitted	N
	Telegraphy - for aural reception	A
	Telegraphy - for automatic reception	B
	Facsimile	C
	Data transmission, telemetry, telecommand	D
	Telephony (including sound broadcasting)	E
	Television (video)	F
	Combination of the above	W
	Cases not otherwise covered	X

Appendix 6 Part A - Additional characteristics for the classification of emissions

For a more complete description of an emission, two optional additional characteristics should be added. These are: fourth symbol - details of signal(s), and fifth symbol - nature of multiplexing. Where the fourth or the fifth symbol is not used this should be indicated by a dash where each symbol would otherwise appear.

1. **Fourth symbol - Details of signal(s)**

Two-condition code with elements of differing numbers and/or durations	A
Two-condition code with elements of the same number and duration without error-correction	B
Two-condition code with elements of the same number and duration with error-correction	C
Four-condition code in which each condition represents a signal element (of one or more bits)	D

Multi-condition code in which each condition represents a signal element (of one or more bits)	E
Multi-condition code in which each condition or combination of conditions represents a character	F
Sound of broadcasting quality (monophonic)	G
Sound of broadcasting quality (stereophonic or quadrophonic)	H
Sound of commercial quality (excluding categories given below)	J
Sound of commercial quality with the use of frequency inversion or band-splitting	K
Sound of commercial quality with separate frequency-modulated signals to control the level of demodulated signal	L
Monochrome	M
Colour	N
Combination of the above	W
Cases not otherwise covered	X

2. Fifth symbol - Nature of multiplexing

None	N
Code-division multiplex (this includes bandwidth expansion techniques)	C
Frequency-division multiplex	F
Time-division multiplex	T
Combination of frequency-division multiplex and time-division multiplex	W
Other types of multiplexing	X

Appendix 6 Part B - Examples for the designation of emissions

NONE	continuous wave emission
100H A1AAN	amplitude modulation; signal with quantized or digital information; continuous wave telegraphy, Morse code; bandwidth 100 Hz
2K10 A2AAN	amplitude modulation; signal with quantized or digital information; telegraphy by on-off keying of a tone modulated carrier, Morse code; bandwidth 2.1 kHz
8K00 A3EGN	amplitude modulation; sound broadcasting; double-sideband; bandwidth 8 kHz
6K00 A3EJN	amplitude modulation; telephony (commercial quality); double-sideband (single channel); bandwidth 6 kHz
328K A8--	amplitude modulation; composite emissions; double-sideband radio-relay system, frequency division multiplex; bandwidth 328 kHz
13M1 A8W--	amplitude modulation; composite emissions; double-sideband, television relay; bandwidth 13.13 MHz
20K9 A9WWF	amplitude modulation; composite emissions; double-sideband emission of VOR with voice (VOR = VHF omnidirectional radio range); bandwidth 20.94 kHz
6K00 B8EJN	amplitude modulation; telephony (commercial quality); independent sideband (two or more channels); bandwidth 6 kHz
12K0 B9WWF	amplitude modulation; composite emissions; independent sidebands; several telegraph channels with error-correction together with several telephone channels with privacy; frequency division multiplex; bandwidth 12 kHz
6M25 C3F--	amplitude modulation; television; vision; bandwidth 6.25 MHz
304H F1BBN	frequency modulation; signal with quantized or digital information; telegraphy without error-correction (single channel); bandwidth 304 Hz
304H F1BCN	frequency modulation; signal with quantized or digital information; selective calling signal; bandwidth 304 Hz
304H F1BCN	frequency modulation; signal with quantized or digital information; telegraphy, narrow-band direct-printing with error-correction (single channel); bandwidth 304 Hz
1K98 F1C--	frequency modulation; facsimile; facsimile by direct frequency modulation of the carrier; black and white; bandwidth 1.98 kHz
1K98 F3C--	frequency modulation; facsimile; analogue facsimile; bandwidth 1.98 kHz
180K F3EGN	frequency modulation; sound broadcasting; bandwidth 180 kHz
750K F3EGN	frequency modulation; television; sound; bandwidth 750 kHz

16K0 F3EJN	frequency modulation; telephony (commercial quality); commercial telephony; bandwidth 16 kHz
1K42 F7BDX	frequency modulation; signal with quantized or digital information; four-frequency duplex telegraphy; bandwidth 1.42 kHz
300K F8EHF	frequency modulation; composite emissions; stereophonic sound broadcasting with multiplexed subsidiary telephony sub-carrier; bandwidth 300 kHz
3M70 F8EJF	frequency modulation; composite emissions; radio-relay system, frequency division multiplex; bandwidth 3.702 MHz
2K11 H2BFN	amplitude modulation; signal with quantized or digital information; selective calling signal using sequential single frequency code, single-sideband full carrier; bandwidth 2.11 kHz
3K00 H3EJN	amplitude modulation; telephony (commercial quality); single-sideband, full carrier (single channel); bandwidth 3 kHz
134H J2BCN	amplitude modulation; signal with quantized or digital information; direct-printing telegraphy using a frequency shifted modulating subcarrier, with error-correction, single-sideband, suppressed carrier (single channel); bandwidth 134 Hz
1K98 J3C--	amplitude modulation; facsimile; analogue facsimile; frequency modulation of an audio frequency sub-carrier which modulates the main carrier, single-sideband suppressed carrier; bandwidth 1.98 kHz
4K45 J3EGN	amplitude modulation; sound broadcasting; single-sideband; suppressed; bandwidth 4.45 kHz
2K70 J3EJN	amplitude modulation; telephony (commercial quality); single-sideband, suppressed carrier (single channel); bandwidth 2.7 kHz
5K75 J8EKF	amplitude modulation; telephony (commercial quality); telephony with privacy, single-sideband, suppressed carrier (two or more channels); bandwidth 5.75 kHz
8M00 M7EJT	pulse modulation; composite emissions; radio-relay system; bandwidth 8 MHz
3M00 P0NAN	pulse modulation; radar; unmodulated pulse emission; bandwidth 3 MHz
2K89 R3CMN	amplitude modulation; facsimile; analogue facsimile by sub-carrier frequency modulation of a single-sideband emission with reduced carrier, monochrome; bandwidth 2.89 kHz
4K00 R3EGN	amplitude modulation; sound broadcasting; single-sideband; reduced carrier (single channel); bandwidth 4 kHz
2K99 R3ELN	amplitude modulation; telephony (commercial quality); telephony with separate frequency modulated signal to control the level of demodulated speech signal, single-sideband, reduced carrier (Lincompex) (single channel); bandwidth 2.99 kHz
2K89 R7BCW	amplitude modulation; signal with quantized or digital information; telegraphy, multi-channel with voice-frequency, error-correction, some channels are time-division multiplexed, single-sideband, reduced carrier; bandwidth 2.885 kHz ☺

18 Classes of stations and nature of the service

AL	Aeronautical radionavigation land station
AM	Aeronautical radionavigation mobile station
AT	Amateur station
AX	Aeronautical fixed station
BC	Broadcasting station, sound
BT	Broadcasting station, television
C	Continuous operation during hours shown
CA	Cargo ship
CO	Station open to official correspondence exclusively
CP	Station open to public correspondence
CR	Station open to limited public correspondence
CV	Station open exclusively to correspondence of a private agency
DR	Directive antenna provided with a reflector
EA	Space station in the amateur-satellite service
EB	Space station in the broadcasting-satellite service (sound broadcasting)
EC	Space station in the fixed-satellite service
ED	Space telecommand space station
EE	Space station in the standard frequency-satellite service
EF	Space station in the radiodetermination-satellite service
EG	Space station in the maritime mobile-satellite service
EH	Space research space station
EI	Space station in the mobile-satellite service
EJ	Space station in the aeronautical mobile-satellite service
EK	Space tracking space station
EM	Space station in the meteorological-satellite service
EN	Space station in the radionavigation-satellite service
EO	Space station in the aeronautical radionavigation-satellite service
EQ	Space station in the maritime radionavigation-satellite service
ER	Space telemetering space station
ES	Station in the intersatellite service
ET	Space station in the space operation service
EU	Space station in the land mobile-satellite service
EV	Space station in the broadcasting-satellite service (television)
EW	Space station in the earth exploration-satellite service
EX	Experimental station
EY	Space station in the time signal-satellite service
FA	Aeronautical station
FB	Base station
FC	Coast station
FD	Aeronautical station of the aeronautical mobile (R) service
FG	Aeronautical station of the aeronautical mobile (OR) service
FL	Land station
FP	Port station
FR	Receiving station only, connected with the general network of telecommunication channels
FS	Land station established solely for the safety of life
FX	Fixed station
GS	Station on board a warship or a military or naval aircraft
H	Schedule operation
H8	8-hour service provided by a ship station of the third category
H16	16-hour service provided by a ship station of the second category
H24	Continuous service throughout the twenty-four hours
HJ	Day service
HN	Night service
HT	Transition period service

HX	Intermittent service throughout the twenty-four hours, or stations having no specific working hours
I	Intermittent operation during the time indicated
LR	Radiolocation land station
MA	Aircraft station
ME	Space station
ML	Land mobile station
MO	Mobile station
MR	Radiolocation mobile station
MS	Ship station
MX	Fixed station used for transmission of meteorological information
ND	Non-directional antenna
NL	Maritime radionavigation land station
NR	Radionavigation mobile station
OD	Oceanographic data station
OE	Oceanographic data interrogation station
OT	Station open exclusively to operational traffic of the service concerned
PA	Passenger ship
PL	Combination of two or more classes of station (limited to collective entries made under the terms of RR2184)
PX	Fixed station used for press transmission
RA	Radio astronomy station
RC	Non-directional radiobeacon
RD	Directional radiobeacon
RG	Radio direction-finding station
RM	Maritime radionavigation mobile station
RN	Radionavigation land station
RT	Revolving radiobeacon
SA	Meteorological aids mobile station
SM	Meteorological aids base station
SS	Standard frequency and time signal station
TA	Space operation earth station in the amateur-satellite service
TB	Aeronautical earth station
TC	Earth station in the fixed-satellite service
TD	Space telecommand earth station
TE	Satellite emergency position-indicating radiobeacon (EPIRB) in the mobile-satellite service
TF	Fixed earth station in the radiodetermination-satellite service
TG	Ship earth station
TH	Earth station in the space research service
TI	Coast earth station
TJ	Aircraft earth station
TK	Space tracking earth station
TL	Mobile earth station in the radiodetermination-satellite service
TM	Earth station in the meteorological-satellite service
TN	Fixed earth station in the radionavigation-satellite service
TO	Mobile earth station in the aeronautical radionavigation-satellite service
TP	Receiving earth station
TQ	Mobile earth station in the maritime radionavigation-satellite service
TR	Space telemetering earth station
TS	Television, sound channel
TT	Earth station in the space operation service
TU	Land mobile earth station
TV	Television, vision channel
TW	Earth station in the earth exploration-satellite service
TX	Fixed earth station in the maritime radionavigation-satellite service
TY	Base earth station
TZ	Fixed earth station in the aeronautical radionavigation-satellite service
UA	Mobile earth station
UB	Earth station in the broadcasting-satellite service (sound broadcasting)
UD	Space telecommand mobile earth station

UH	Mobile earth station in the space research service
UK	Space tracking mobile earth station
UM	Mobile earth station in the meteorological-satellite service
UN	Mobile earth station in the radionavigation-satellite service
UR	Space telemetering mobile earth station
UT	Mobile earth station in the space operation service
UV	Earth station in the broadcasting-satellite service (television)
UW	Mobile earth station in the earth exploration-satellite service
VA	Land earth station ☺

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19 Terms and definitions

Introduction

Notes 1. If, in the text of a definition below, a term is printed in italics, this means that the term itself is defined in this Article.

2. Definitions of services and systems without frequency allocations on longwave and shortwave (e.g. most satellite services) are omitted.

RR 2 For the purposes of these Regulations, the following terms shall have the meanings defined below. These terms and definitions do not, however, necessarily apply for other purposes.

Section I - General Terms

RR 3 **Administration**: Any governmental department or service responsible for discharging the obligations undertaken in the Conventions of the International Telecommunication Union and the Regulations.

RR 4 **Telecommunication**: Any transmission, *emission* or reception of signs, signals, writing, images and sounds or intelligence of any nature by wire, *radio*, optical or other electromagnetic systems.

RR 5 **Radio**: A general term applied to the use of *radio waves*.

RR 6 **Radio Waves** or **Hertzian Waves**: Electromagnetic waves of frequencies arbitrarily lower than 3000 GHz, propagated in space without artificial guide.

RR 7 **Radiocommunication**: *Telecommunication* by means of *radio waves*.

RR 8 **Terrestrial Radiocommunication**: Any *radiocommunication* other than *space radiocommunication* or *radio astronomy*.

RR 9 **Space Radiocommunication**: Any *radiocommunication* involving the use of one or more *space stations* or the use of one or more *reflecting satellites* or other objects in space.

RR 10 **Radiodetermination**: The determination of the position, velocity and/or other characteristics of an object, or the obtaining of information relating to these parameters, by means of the propagation properties of *radio waves*.

RR 11 **Radionavigation**: *Radiodetermination* used for the purposes of navigation, including obstruction warning.

RR 12 **Radiolocation**: *Radiodetermination* used for purposes other than those of *radionavigation*.

RR 13 **Radio Direction-Finding**: *Radiodetermination* using the reception of *radio waves* for the purpose of determining the direction of a *station* or object.

RR 14 **Radio Astronomy**: Astronomy based on the reception of *radio waves* of cosmic origin.

RR 15 **Coordinated Universal Time (UTC)**: Time scale, based on the second (SI), as defined and recommended by the CCIR (the full definition is contained in CCIR Recommendation 460-2), and maintained by the International Time Bureau (BIPM). For most practical purposes associated with the Radio Regulations, UTC is equivalent to mean solar time at the prime meridian (0° longitude), formerly expressed in GMT.

RR 16 **Industrial, Scientific and Medical (ISM) Applications** (of radio frequency energy): Operation of equipment or appliances designed to generate and use locally radio frequency energy for industrial, scientific, medical, domestic or similar purposes, excluding applications in the field of *telecommunications*.

Section II - Specific terms related to frequency management

RR 17 **Allocation** (of a frequency band): Entry in the Table of Frequency Allocations of a given frequency band for the purpose of its use by one or more terrestrial or space *radiocommunication services* or the *radio astronomy service* under specified conditions. This term shall also be applied to the frequency band concerned.

RR 18 **Allotment** (of a radio frequency or radio frequency channel): Entry of a designated frequency channel in an agreed plan, adopted by a competent conference, for use by one or more administrations for a terrestrial or space *radiocommunication service* in one or more identified countries or geographical areas and under specified conditions.

RR 19 **Assignment** (of a radio frequency or radio frequency channel): Authorization given by an administration for a radio *station* to use a radio frequency or radio frequency channel under specified conditions.

Section III - Radio services

RR 20 **Radiocommunication Service**: A service as defined in this Section involving the transmission, *emission* and/or reception of *radio waves* for specific *telecommunication* purposes. In these Regulations, unless otherwise stated, any radiocommunication service relates to *terrestrial radiocommunication.*

RR 21 **Fixed Service**: A *radiocommunication service* between specified fixed points.

RR 23 **Aeronautical Fixed Service**: A *radiocommunication service* between specified fixed points provided primarily for the safety of air navigation and for the regular, efficient and economical operation of air transport.

RR 26 **Mobile Service**: A *radiocommunication service* between *mobile* and *land stations*, or between *mobile stations*.

RR 28 **Land Mobile Service**: A *mobile service* between *base stations* and *land mobile stations*, or between *land mobile stations*.

RR 30 **Maritime Mobile Service**: A *mobile service* between *coast stations* and *ship stations*, or between *ship stations*. or between associated *on-board communication stations*; *survival craft stations* and *emergency position-indicating radiobeacon stations* may also participate in this service.

RR 32 **Port Operations Service**: A *maritime mobile service* in or near a port, between *coast stations* and *ship stations*, or between *ship stations*, in which messages are restricted to those relating to the operational handling, the movement and the safety of ships and, in emergency, to the safety of persons. Messages which are of a *public correspondence* nature shall be exluded from this service.

RR 33 **Ship Movement Service**: A *safety service* in the *maritime mobile service* other than a *port operations service*, between *coast stations* and *ship stations*, or between *ship stations*, in which messages are restricted to those relating to the movement of ships. Messages which are of a *public correspondence* nature shall be exluded from this service.

RR 34 **Aeronautical Mobile Service**: A *mobile service* between *aeronautical stations* and *aircraft stations*, or between *aircraft stations*, in which *survival craft stations* may participate; *emergency position-indicating radiobeacon stations* may also participate in this service on designated distress and emergency frequencies.

RR 34A **Aeronautical Mobile Route (R) Service**: An *aeronautical mobile service* reserved for communications relating to safety and regularity of flight, primarily along national or international civil air routes.

RR 34B **Aeronautical Mobile Off-Route (OR) Service**: An *aeronautical mobile service* intended for communications, including those relating to flight coordination, primarily outside national or international civil air routes.

RR 36 **Broadcasting Service**: A *radiocommunication service* in which the transmissions are intended for direct reception by the general public. This service may include sound transmissions, *television* transmissions or other types of transmission.

RR 38 **Radiodetermination Service**: A *radiocommunication service* for the purpose of *radiodetermination.*

RR 40 **Radionavigation Service**: A *radiodetermination service* for the purpose of *radionavigation.*

RR 42 **Maritime Radionavigation Service**: A *radionavigation service* intended for the benefit and for the safe operation of ships.

RR 44 **Aeronautical Radionavigation Service**: A *radionavigation service* intended for the benefit and for the safe operation of aircraft.

RR 46 **Radiolocation Service**: A *radiodetermination service*, for the purpose of *radiolocation.*

RR 47 **Meteorological Aids Service**: A *radiocommunication service* used for meteorological, including hydrological, observations and exploration.

RR 50 **Standard Frequency and Time Signal Service**: A *radiocommunication service* for scientific, technical and other purposes, providing the transmission of specified frequencies, time signals, or both, of stated high precision, intended for general reception.

RR 52 **Space Research Service**: A *radiocommunication service* in which *spacecraft* or other objects in space are used for scientific or technological research purposes.

RR 53 **Amateur Service**: A *radiocommunication service* for the purpose of self-training, intercommunication and technical investigations carried out by amateurs, that is, by duly authorized persons interested in radio technique solely with a personal aim and without pecuniary interest.

RR 54 **Amateur-Satellite Service**: A *radiocommunication service* using *space stations* on earth *satellites* for the same purposes as those of the *amateur service*.

RR 55 **Radio Astronomy Service**: A service involving the use of *radio astronomy*.

RR 56 **Safety Service**: Any *radiocommunication service* used permanently or temporarily for the safeguarding of human life and property.

RR 57 **Special Service**: A *radiocommunication service*, not otherwise defined in this Section, carried on exclusively for specific needs of general utility, and not open to *public correspondence*.

Section IV - Radio stations and systems

RR 58 **Station**: One or more transmitters or receivers or a combination of transmitters and receivers, including the accessory equipment, necessary at one location for carrying on a *radiocommunication service*, or the *radio astronomy service*. Each station shall be classified by the service in which it operates permanently or temporarily.

RR 59 **Terrestrial Station**: A *station* effecting *terrestrial radiocommunication*. In these Regulations, unless otherwise stated, any *station* is a terrestrial station.

RR 60 **Earth Station**: A *station* located either on the Earth's surface or within the major portion of the Earth's atmosphere and intended for communication:

- with one or more *space stations*; or
- with one or more *stations* of the same kind by means of one or more reflecting *satellites* or other objects in space.

RR 61 **Space Station**: A *station* located on an object which is beyond, is intended to go beyond, or has been beyond, the major portion of the Earth's atmosphere.

RR 62 **Survival Craft Station**: A *mobile station* in the *maritime mobile service* or the *aeronautical mobile service* intended solely for survival purposes and located on any lifeboat, life-raft or other survival equipment.

RR 63 **Fixed Station**: A *station* in the *fixed service*.

RR 64 **Aeronautical Fixed Station**: A *station* in the *aeronautical fixed service*.

RR 65 **Mobile Station**: A *station* in the *mobile service* intended to be used while in motion or during halts at unspecified points.

RR 67 **Land Station**: A *station* in the *mobile service* not intended to be used while in motion.

RR 68 **Base Station**: A *land station* in the *land mobile service*.

RR 69 **Land Mobile Station**: A *mobile station* in the *land mobile service* capable of surface movement within the geographical limits of a country or continent.

RR 70 **Coast Station**: A *land station* in the *maritime mobile service*.

RR 72 **Ship Station**: A *mobile station* in the *maritime mobile service* located on board a vessel which is not permanently moored, other than a *survival craft station*.

RR 74 **On-Board Communication Station**: A low-powered *mobile station* in the *maritime mobile service* intended for use for internal communications on board a ship, or between a ship and its lifeboats and life-rafts during lifeboat drills or operations, or for communication within a group of vessels being towed or pushed, as well as for line handling and mooring instructions.

RR 75 **Port Station**: A *coast station* in the *port operations service*.

RR 76 **Aeronautical Station**: A *land station* in the *aeronautical mobile service*. In certain instances, an aeronautical station may be located, for example, on board ship or on a platform at sea.

RR 78 **Aircraft Station**: A *mobile station* in the *aeronautical mobile service*, other than a *survival craft station*, located on board an aircraft.

RR 80 **Broadcasting Station**: A *station* in the *broadcasting service*.

RR 81 **Radiodetermination Station**: A *station* in the *radiodetermination service*.

RR 82 **Radionavigation Mobile Station**: A *station* in the *radionavigation service* intended to be used while in motion or during halts at unspecified points.

RR 83 **Radionavigation Land Station**: A *station* in the *radionavigation service* not intended to be used while in motion.

RR 84 **Radiolocation Mobile Station**: A *station* in the *radiolocation service* intended to be used while in motion or during halts at unspecified points.

RR 85 **Radiolocation Land Station**: A *station* in the *radiolocation service* not intended to be used while in motion.

RR 86 **Radio Direction-Finding Station**: A *radiodetermination station* using *radio direction-finding*.

RR 87 **Radiobeacon Station**: A *station* in the *radionavigation service* the *emissions* of which are intended to enable a *mobile station* to determinate its bearing or direction in relation to the radiobeacon station.

RR 88 **Emergency Position-Indicating Radiobeacon Station**: A *station* in the *mobile service* the *emissions* of which are intended to facilitate search and rescue operations.

RR 89 **Standard Frequency and Time Signal Station**: A *station* in the *standard frequency and time signal service*.

RR 90 **Amateur Station**: A *station* in the *amateur service*.

RR 91 **Radio Astronomy Station**: A *station* in the *radio astronomy service*.

RR 92 **Experimental Station**: A *station* utilizing *radio waves* in experiments with a view to the development of science or technique. This definition does not include *amateur stations*.

RR 93 **Ship's Emergency Transmitter**: A ship's transmitter to be used exclusively on a distress frequency for distress, urgency or safety purposes.

Section V - Operational terms

RR 110 **Public Correspondence**: Any *telecommunication* which the offices and *stations* must, by reason of their being at the disposal of the public, accept for transmission.

RR 111 **Telegraphy** (Note by the General Secretariat: This definition is not in alignment with Annex 2 to the Convention. The corresponding definition in that Annex shall prevail to the extent that there are differences between them (see also Resolution 68).): A form of *telecommunication* which is concerned in any process providing transmission and reproduction at a distance of documentary matter, such as written or printed matter or fixed images, or the reproduction at a distance of any kind of information in such a form. For the purposes of the Radio Regulations, unless otherwise specified therein, telegraphy shall mean a form of *telecommunication* for the transmission of written matter by the use of a signal code.

RR 112 **Telegram**: Written matter intended to be transmitted by *telegraphy* for delivery to the addressee. This term also includes *radiotelegrams* unless otherwise specified. In this definition the term *telegraphy* has the same general meaning as defined in the Convention.

RR 113 **Radiotelegram**: A *telegram*, originating in or intended for a *mobile station* or a *mobile earth station* transmitted on all or part of its route over the *radiocommunication* channels of the *mobile service* or of the *mobile-satellite service*.

RR 114 **Radiotelex Call**: A telex call, originating in or intended for a *mobile station* or a *mobile earth station*, transmitted on all or part of its route over the *radiocommunication* channels of the *mobile service* or of the *mobile-satellite service*.

RR 115 **Frequency-Shift Telegraphy**: *Telegraphy* by frequency modulation in which the telegraph signal shifts the frequency of the carrier between predetermined values.

RR 116 **Facsimile**: A form of *telegraphy* for the transmission of fixed images, with or without half-tones, with a view to their reproduction in a permanent form. In this definition the term *telegraphy* has the same general meaning as defined in the Convention.

RR 117 **Telephony** (Note by the General Secretariat: This definition is not in alignment with Annex 2 to the Convention. The corresponding definition in that Annex shall prevail to the extent that there are differences between them (see also Resolution 68).): A form of *telecommunication* set up for the transmission of speech or, in some cases, other sounds.

RR 118 **Radiotelephone Call**: A telephone call, originating in or intended for a *mobile station* or a *mobile earth station*, transmitted on all or part of its route over the *radiocommunication* channels of the *mobile service* or of the *mobile-satellite service*.

RR 119 **Simplex Operation**: Operating method in which transmission is made possible alternately in each direction of a *telecommunication* channel, for example, by means of manual control. (In general, *duplex operation* and *semi-duplex operation* require two frequencies in *radiocommunication*; *simplex operation* may use either one or two.)

RR 120 **Duplex Operation**: Operating method in which transmission is made possible simultaneously in both directions of a *telecommunication* channel. (In general, *duplex operation* and *semi-duplex operation* require two frequencies in *radiocommunication*; *simplex operation* may use either one or two.)

RR 121 **Semi-Duplex Operation**: A method which is *simplex operation* at one end of the circuit and *duplex operation* at the other. (In general, *duplex operation* and *semi-duplex operation* require two frequencies in *radiocommunication*; *simplex operation* may use either one or two.)

RR 122 **Television**: A form of *telecommunication* for the transmission of transient images of fixed or moving objects.

RR 125 **Telemetry**: The use of *telecommunication* for automatically indicating or recording measurements at a distance from the measuring instrument.

RR 126 **Radiotelemetry**: *Telemetry* by means of *radio waves*.

RR 128 **Telecommand**: The use of *telecommunication* for the transmission of signals to initiate, modify or terminate functions of equipment at a distance.

Section VI - Characteristics of emissions and radio equipment

RR 131 **Radiation**: The outward flow of energy from any source in the form of *radio waves*.

RR 132 **Emission**: *Radiation* produced, or the production of *radiation*, by a radio transmitting *station*. For example, the energy radiated by the local oscillator of a radio receiver would not be an emission but a radiation.

RR 133 **Class of Emission**: The set of characteristics of an *emission*, designated by standard symbols, e. g. type of modulation of the main carrier, modulating signal, type of information to be transmitted, and also, if appropriate, any additional signal characteristics.

RR 134 **Single-Sideband Emission**: An amplitude modulated *emission* with one sideband only.

RR 135 **Full Carrier Single-Sideband Emission**: A *single-sideband emission* without reduction of the carrier.

RR 136 **Reduced Carrier Single-Sideband Emission**: A *single-sideband emission* in which the degree of carrier suppression enables the carrier to be reconstituted and to be used for demodulation.

RR 137 **Suppressed Carrier Single-Sideband Emission**: A *single-sideband emission* in which the carrier is virtually suppressed and not intended to be used for demodulation.

RR 138 **Out-of-Band Emission** (in French: emission hors bande; in Spanish: emisión fuera de banda): *Emission* on a frequency or frequencies immediately outside the *necessary bandwidth* which results from the modulation process, but excluding *spurious emissions*.

RR 139 **Spurious Emission** (in French: rayonnement non essentiel; in Spanish: emisión no esencial): *Emission* on a frequency or frequencies which are outside the *necessary bandwidth* and the level of which may be reduced without affecting the corresponding transmission of information. Spurious emissions include harmonic *emissions*, parasitic *emissions*, intermodulation products and frequency conversion products, but exclude *out-of-band emissions*.

RR 140 **Unwanted Emissions** (in French: rayonnements non désirés; in Spanish: emisiones no deseadas): Consist of *spurious emissions* and *out-of-band emissions*.

RR 141 **Assigned Frequency Band**: The frequency band within which the *emission* of a *station* is authorized; the width of the band equals the *necessary bandwidth* plus twice the absolute value of the *frequency tolerance*. Where *space stations* are concerned, the assigned frequency band includes twice the maximum Doppler shift that may occur in relation to any point of the Earth's surface.

RR 142 **Assigned Frequency**: The centre of the frequency band assigned to a *station*.

RR 143 **Characteristic Frequency**: A frequency which can be easily identified and measured in a given *emission*. A carrier frequency may, for example, be designated as the characteristtic frequency.

RR 144 **Reference Frequency**: A frequency having a fixed and specified position with respect to the *assigned frequency*. The displacement of this frequency with respect to the *assigned frequency* has the same absolute value and sign that the displacement of the *characteristic frequency* has with respect to the centre of the frequency band occupied by the *emission*.

RR 145 **Frequency Tolerance**: The maximum permissible departure by the centre frequency of the frequency band occupied by an *emission* from the *assigned frequency* or, by the *characteristic frequency* of an *emission* from the *reference frequency*. The frequency tolerance is expressed in parts in 10^6 or in hertz.

RR 146 **Necessary Bandwidth**: For a given *class of emission*, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

RR 147 **Occupied Bandwidth**: The width of a frequency band such that, below the lower and above the upper frequency limits, the *mean powers* emitted are each equal to a specified percentage $\beta/2$ of the total *mean power* of a given *emission*. Unless otherwise specified by the CCIR for the appropriate *class of emission*, the value of $\beta/2$ should be taken as 0.5 % .

RR 148 **Right-Hand** (clockwise) **Polarized Wave**: An elliptically- or circularly- polarized wave, in which the electric field vector, observed in any fixed plane, normal to the direction of propagation, whilst looking in the direction of propagation, rotates with time in a right-hand or clockwise direction.

RR 149 **Left-Hand** (anticlockwise) **Polarized Wave**: An elliptically- or circularly-polarized wave, in which the electric field vector, observed in any fixed plane, normal to the direction of propagation, whilst looking in the direction of propagation, rotates with time in a left-hand or anticlockwise direction.

RR 150 **Power**: Whenever the power of a radio transmitter etc. is referred to it shall be expressed in one of the following forms, according to the *class of emission*, using the arbitrary symbols indicated:

- **Peak Envelope Power** (*PX* or *pX*);
- **Mean Power** (*PY* or *pY*);
- **Carrier Power** (*PZ* or *pZ*).

For different *classes of emission*, the relationships between *peak envelope power*, *mean power* and *carrier power*, under the conditions of normal operation and of no modulation, are contained in CCIR Recommendations which may be used as a guide. For use in formulae, the symbol *P* denotes power expressed in watts and the symbol P denotes power expressed in decibels relative to a reference level.

RR 151 **Peak Envelope Power** (of a radio transmitter): The average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle at the crest of the modulation envelope taken under normal operating conditions.

RR 152 **Mean Power** (of a radio transmitter): The average power supplied to the antenna transmission line by a transmitter during an interval of time sufficiently long compared with the lowest frequency encountered in the modulation taken under normal operating conditions.

RR 153 **Carrier Power** (of a radio transmitter): The average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle taken under the condition of no modulation.

RR 154 **Gain of an Antenna**: The ratio, usually expressed in decibels, of the power required at the input of a loss-free reference antenna to the power supplied to the input of the given antenna to produce, in a given direction, the same field strength or the same power flux-density at the same distance. When not specified otherwise, the gain refers to the direction of maximum *radiation*. The gain may be considered for a specified polarization. Depending on the choice of the reference antenna a distinction is made between:

a) **Absolute or Isotropic Gain** (G_i), when the reference antenna is an isotropic antenna isolated in space;

b) **Gain Relative to a Half-Wave Dipole** (G_d), when the reference antenna is a half-wave dipole isolated in space whose equatorial plane contains the given direction;

c) **Gain Relative to a Short Vertical Antenna** (G_v), when the reference antenna is a linear conductor, much shorter than one quarter of the wavelength, normal to the surface of a perfectly conducting plane which contains the given direction.

RR 155 **Equivalent Isotropically Radiated Power** (E.I.R.P.): The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna (*absolute or isotropic gain*).

RR 156 **Effective Radiated Power** (E.R.P.) (in a given direction): The product of the power supplied to the antenna and its *gain relative to a half-wave dipole* in a given direction.

RR 157 **Effective Monopole Radiated Power** (E.M.R.P.) (in a given direction): The product of the power supplied to the antenna and its *gain relative to a short vertical antenna* in a given direction.

RR 158 **Tropospheric Scatter**: The propagation of *radio waves* by scattering as a result of irregularities or discontinuities in the physical properties of the troposphere.

RR 159 **Ionospheric Scatter**: The propagation of *radio waves* by scattering as a result of irregularities or discontinuities in the physical properties of the ionosphere.

Section VII - Frequency sharing

RR 160 **Interference**: The effect of unwanted energy due to one or a combination of *emissions*, *radiations*, or inductions upon reception in a *radiocommunication* system, manifested by any performance degradation, misinterpretation, or loss of information which could be extracted in the absence of such unwanted energy.

RR 161 **Permissible Interference** (this term is used in the coordination of frequency assignments between administrations): Observed or predicted *interference* which complies with quantitative *interference* and sharing criteria contained in these Regulations or in CCIR Recommendations or in special agreements as provided for in these Regulations.

RR 162 **Accepted Interference** (this term is used in the coordination of frequency assignments between administrations): *Interference* at a higher level than that defined as *permissible interference* and which has been agreed upon between two or more administrations without prejudice to other administrations.

RR 163 **Harmful Interference** (Note by the General Secretariat: This definition is not in alignment with Annex 2 to the Convention. The corresponding definition in that Annex shall prevail to the extent that there are differences between them (see also Resolution 68).): *Interference* which endangers the functioning of a *radionavigation service* or of other *safety services* or seriously degrades, obstructs, or repeatedly interrupts a *radiocommunication service* operating in accordance with these Regulations.

RR 164 **Protection Ratio** (R.F.): The minimum value of the wanted-to-unwanted signal ratio, usually expressed in decibels, at the receiver input, determined under specified conditions such that a specified reception quality of the wanted signal is achieved at the receiver output.

Section VIII - Technical terms relating to space

RR 169 **Deep Space**: Space at distances from the Earth approximately equal to, or greater than, the distance between the Earth and the Moon.

RR 170 **Spacecraft**: A man-made vehicle which is intended to go beyond the major portion of the Earth's atmosphere.

RR 171 **Satellite**: A body which revolves around another body of preponderant mass and which has a motion primarily and permanently determined by the force of attraction of that other body.

RR 172 **Active Satellite**: A *satellite* carrying a *station* intended to transmit or retransmit radiocommunication signals.

RR 173 **Reflecting Satellite**: A *satellite* intended to reflect radiocommunication *signals*.

RR 174 **Active Sensor**: A measuring instrument in the *earth exploration-satellite service* or in the *space research service* by means of which information is obtained by transmission and reception of *radio waves*.

RR 175 **Passive Sensor**: A measuring instrument in the *earth exploration-satellite service* or in the *space research service* by means of which information is obtained by reception of *radio waves* of natural origin.

RR 176 **Orbit**: The path, relative to a specified frame of reference, described by the centre of mass of a *satellite* or other object in space subjected primarily to natural forces, mainly the force of gravity.

RR 177 **Inclination of an Orbit** (of an earth satellite): The angle determined by the plane containing the *orbit* and the plane of the Earth's equator.

RR 178 **Period** (of a satellite): The time elapsing between two consecutive passages of a *satellite* through a characteristic point on its *orbit*.

RR 179 **Altitude of the Apogee** or **of the Perigee**: The altitude of the apogee or perigee above a specified reference surface serving to represent the surface of the Earth.

RR 180 **Geosynchronous Satellite**: An earth *satellite* whose period of revolution is equal to the period of rotation of the Earth about its axis.

RR 181 **Geostationary Satellite**: A *geosynchronous satellite* whose circular and direct *orbit* lies in the plane of the Earth's equator and which thus remains fixed relative to the Earth; by extension, a *satellite* which remains approximately fixed relative to the Earth.

RR 182 **Geostationary-Satellite Orbit**: The *orbit* of a *geosynchronous satellite* whose circular and direct *orbit* lies in the plane of the Earth's equator.

Nomenclature of the frequency and wavelength bands used in radiocommunication

RR 208 The radio spectrum shall be subdivided into nine frequency bands, which shall be designated by progressive whole numbers in accordance with the following table. As the unit of frequency is the hertz (Hz), frequencies shall be expressed

- in kilohertz (kHz), up to and including 3000 kHz;
- in megahertz (MHz), above 3 MHz, up to and including 3000 MHz;
- in gigahertz (GHz), above 3 GHz, up to and including 3000 GHz.

For bands above 3000 GHz, i. e. centimillimetric waves, micrometric waves and decimicrometric waves, it would be appropriate to use terahertz (THz).

However, where adherence to these provisions would introduce serious difficulties, for example in connection with the notification and registration of frequencies, the lists of frequencies and related matters, reasonable departures may be made.

band number	symbols	frequency range (lower limit exclusive, upper limit inclusive)	corresponding metric subdivision	metric abbreviations for the bands
4	VLF	3 to 30 kHz	myriametric waves	B.Mam
5	LF	30 to 300 kHz	kilometric waves	B.km
6	MF	300 to 3000 kHz	hectometric waves	B.hm
7	HF	3 to 30 MHz	decametric waves	B.dam
8	VHF	30 to 300 MHz	metric waves	B.m
9	UHF	300 to 3000 MHz	decimetric waves	B.dm
10	SHF	3 to 30 GHz	centimetric waves	B.cm
11	EHF	30 to 300 GHz	millimetric waves	B.mm
12		300 to 3000 GHz	decimillimetric waves	

Note 1: "Band number N" (N = band number) extends from 0.3 x 10^N Hz to 3 x 10^N Hz.

Note 2: Prefix: k = kilo (10^3), M = mega (10^6), G = giga (10^9), T = tera (10^{12}).

RR 209 In communications between administrations and the ITU, no names, symbols or abbreviations should be used for the various frequency bands other than those specified in RR 208.

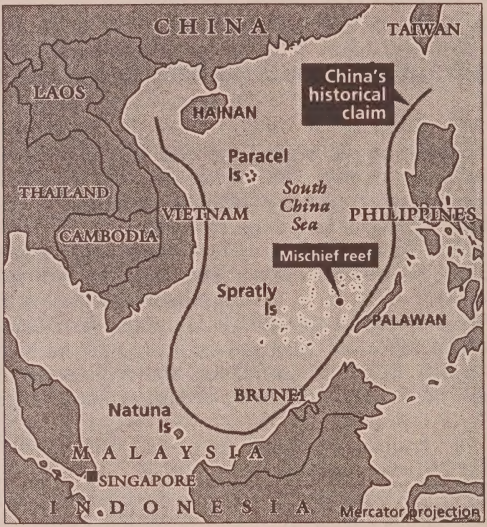
Nomenclature of dates and times used in radiocommunication

RR 235 Any date used in relation to radiocommunication shall be according to the Gregorian Calendar.

RR 236 If in a date the month is not indicated either in full or in an abbreviated form, it shall be expressed in an all-numeric form with the fixed sequence of figures, two of each representing the day, month and year.

RR 237 Whenever a date is used in connection with Coordinated Universal Time (UTC), this date shall be that of the prime meridian at the appropriate time, the prime meridian corresponding to zero degrees geographical longitude.

RR 238 Whenever a specified time is used in international radiocommunication activities, UTC shall be applied, unless otherwise indicated, and it shall be presented as a four-digit group (0000-2359). The abbreviation UTC shall be used in all languages. ☺



Radio listeners in Southeast Asia expect some interesting monitoring in the near future. The next local armed conflict will occur between VietNam and more and more aggressive China. The next regional war may take place between ASEAN member states and China, and - in the end - there could escalate a global war between the United States of America and China. After China (!) authorized the tiny Crestone Energy company from the United States of America to explore for oil in the patch of seabed off VietNam's southern coast - claimed by both countries - VietNam recently leased two exploration blocks to oil giant Conoco, in order to share economic interests with the world's largest sea power in the disputed area. Although these blocks # 133 and 134 are located about 400 km southeast of Ho Chi Minh City and more than 1,100 km south of China's Hainan island, China still claims "indisputable souvereignty over the Nansha (Spratly) Islands". VietNam says, of course, that "the area is under our jurisdiction and we can do whatever we want with it." In the meantime, leading strategic thinkers in Indonesia believe that ASEAN countries may have to prepare themselves for a possible military confrontation with China, since the latter will attempt to secure access to natural resources throughout the South China Sea and even beyond the Natuna Islands. By consequence, more than 19,000 servicemen, 50 warships and 40 combat aircraft took place in Indonesia's largest air, land and sea manoeuvres around the Natuna islands recently, and the 1996 joint war games with Malaysia off the Kalimantan coast will definitely be repeated in early 1997. Needless to say, the usual gabble about a so-called "policy of constructively engaging China" reminds us immediately of that foul smell of the so-called "policy of constructive dialogue" between leading German politicians and Iran's regime that has had the full supply of successive German governments for obvious and scandalous reasons. Certain terror countries need a tough reply now and then - remember the Balkan and Gulf Wars!

20 Aeronautical Mobile Service regulations

20.1 Terms and definitions

AP27.1 **Frequency Allotment Plan**: A plan which shows the frequencies to be used in particular areas without specifying the stations to which the frequencies are to be assigned.

AP27.2 The terms to express the different methods of frequency distribution as used in this Appendix have the following meanings

frequency distribution to	English	French	Spanish
services	allocation (to allocate)	attribution (attribuer)	atribución (atribuir)
areas	allotment (to allot)	allotissement (allotir)	adjudicación (adjudicar)
stations	assignment (to assign)	assignation (assigner)	asignación (asignar)

AP27.3 **Major World Air Route**: A long-distance route, made up of one or more segments, essentially international in character, extending through more than one country and requiring long-distance communication facilities.

AP27.4 **Major World Air Route Area** (MWARA): An area embracing a certain number of Major World Air Routes, which generally follow the same traffic pattern and are so related geographically that the same frequency families may logically be applied.

AP27.5 **Regional And Domestic Air Routes**: All those routes using the Aeronautical Mobile (R) Service not covered by the definition of a Major World Air Route in AP27.3 .

AP27.6 **Regional And Domestic Air Routes Area** (RDARA): An area embracing a certain number of the air routes defined in AP27.5 .

AP27.7 **Volmet Allotment Area**: An area encompassing all points where an HF broadcast facility might be required to operate on a family of frequencies common to the area.

AP27.8 **Volmet Reception Area**: An area within which aircraft should be able to receive broadcasts from one or more stations in the associated VOLMET Allotment Area.

AP27.8A **World-Wide Allotment Area**: An area in which frequencies are allotted to provide long-distance communication between an aeronautical station within that allotment area and aircraft operating anywhere in the world. (The type of communication referred to herein may be regulated by administrations.)

AP27.9 **Family Of Frequencies In The Aeronautical Mobile (R) Service**: This contains two or more frequencies selected from different aeronautical mobile (R) bands and is intended to permit communication at any time within the authorized area of use (see AP27.189 to AP27.207A) between aircraft stations and appropriate aeronautical stations.

20.2 Channel characteristics and utilization

AP27.10 The frequency separation between carrier (reference) frequencies shall be 3 kHz. This is adequate to permit communications using the classes of emission referred to in AP27.49 - AP27.52 in the frequency bands between 2850 kHz and 22000 kHz allocated exclusively to the aeronautical mobile (R) service. The carrier (reference) frequency of the channels in the Plan shall be an integral multiple of 1 kHz.

AP27.11 For radiotelephone emissions the audio frequencies will be limited to between 300 and 2700 Hz and the occupied bandwidth of other authorized emissions will not exceed the upper limit of J3E emissions. In specifying these limits, however, no restriction in their extension is implied in so far as emissions other than J3E are concerned, provided that the limits of unwanted emissions are met (see AP27.66B and AP27.66C).

AP27.11A Note: For aircraft and aeronautical station transmitter types first installed before 01 February 1983, the audio frequencies will be limited to 3000 Hz.

AP27.11B On account of the possibility of interference, a given channel should not be used in the same allotment area for radiotelephony and data transmissions.

AP27.12 The use of channels derived from the frequencies indicated in AP27.16 for the various classes of emissions other than J3E and H2B will be subject to special arrangements by the administrations concerned and affected in order to avoid harmful interference which may result from the simultaneous use of the same channel for several classes of emission.

AP27.14 To preclude the possibility of interference, adjacent channels in the list of frequencies in AP27.16 have not as a rule been allotted to the same MWARA, RDARA or VOLMET areas. However, to satisfy particular needs, the administrations concerned may conclude special arrangements, for the assignment of adjacent channels derived from the frequencies in the table (AP27.16).

AP27.15 The arrangements contemplated in AP27.12 and AP27.14 should be made under the Articles of the International Telecommunication Convention and the Radio Regulations entitled "Special Arrangements".

20.3 Frequencies allotted

AP27.16 The list of carrier (reference) frequencies allotted in the bands allocated exclusively to the aeronautical mobile (R) service, on the basis of the frequency separation provided for under AP27.10, will be found in chapter 3.3 of this reference book. To calculate the assigned frequency from a carrier (reference) frequency given therein, reference should be made to AP27.72, AP27.72B and AP27.73 .

20.4 Classes of emission

AP27.49 In the aeronautical mobile (R) service the use of emissions such as those listed below is permissible subject to compliance with the special provisions applicable to each case and provided that such use does not cause harmful interference to other users of the channel concerned.

AP27.50 Telephony - amplitude modulation:
- single sideband, suppressed carrier (J3E)

AP27.51 Telegraphy (including automatic data transmission)
- amplitude modulation:
- telegraphy without the use of a modulating audio frequency (by on-off keying) (A1A[1])
- telegraphy by the on-off keying of an amplitude modulating audio frequency or audio frequencies or by the on-off keying of the modulated emission and including selective calling, single sideband, full carrier (H2B)
- multichannel voice frequency telegraphy, single sideband, suppressed carrier (J2B)
- other transmissions such as automatic data transmission, single sideband, suppressed carrier (J2D)

AP27.52
- frequency modulation:
- telegraphy by frequency shift keying without the use of a modulating audio frequency, one of two frequencies being emitted at any instant (F1B[1])

[1] A1A and F1B are permitted provided they do not cause harmful interference to the classes of emission H2B, J2B, J3E and J9D. In addition, care should be taken to place these emissions at or near the centre of the channnel. However, a modulating audio frequency is permitted with single sideband transmitters, where the carrier is suppressed.

AP27.72 For single-sideband emissions, except the class of emission H2B, the assigned frequency shall be at a value 1400 Hz above the carrier (reference) frequency.

AP27.72B For classes of emission A1A and F1B the assigned frequency shall be chosen in accordance with the provisions of the footnote to AP27.51 and AP27.52.

AP27.73 The assigned frequency of a station employing double sideband emissions (A3E) shall be at the carrier (reference) frequency.

20.5 Frequency Allotment Plan by areas (AP27.186 to AP27.189)

MWARAs

AFI	2851 2878 3419 3425 3467 4657 5493 5652 5658 6559 6574 6673 8894 8903 11300 11330 13273 13288 13294 17961
CAR	2887 3455 5520 5550 6577 6586 8846 8918 11387 11396 13297 17907
CEP	2869 3413 4657 5547 5574 6673 8843 10057 11282 13300 17904
CWP	2998 3455 4666 5652 5661 6532 6562 8903 10081 11384 13300 17904
EA	3016 3485 3491 5655 5670 6571 8897 10042 11396 13297 13303 13309 17907
EUR	3479 5661 6598 10084 13288 17961
INO	3476 5634 8879 13306 17961
MID	2944 2992 3467 3473 4669 5658 5667 6625 6631 8918 8951 10018 11375 13288 13312 17961
NAT	2872 2899 2962 2971 3016 3476 4675 5598 5616 5649 6622 6628 8825 8831 8864 8879 8891 8906 11279 11309 11336 13291 13306 17946
NCA	3004 3019 4678 5646 5664 6592 10096 13303 13315 17958
NP	2932 5628 6655 6661 10048 11330 13300 17904
SAM	2944 3479 4669 5526 6649 8855 10024 10096 11360 13297 17907
SAT	2854 2935 3452 5565 6535 8861 11291 13315 13357 17955
SEA	3470 3485 5649 5655 6556 8942 10066 11396 13309 13318 17907
SP	3467 5559 5643 8867 10084 11327 13300 17904

RDARAs

1B	2860 2881 2890 3458 3473 3488 5484 5568 6550 6595 10066
1C	2977 2983 3464 3470 4666 5577 5595 6544 8840 11366
1D	2974 2980 2989 3410 3416 3446 4651 5622 5628 5637 6604 6610 8828 10060 11384
1E	2965 3491 5583 6667 10036
2	2938 2950 4696 5556 6583 6601 8846 8855 8888 10015 10045 11297 11360 11390 13321 13357 17964
2A	2851 2863 2869 2875 2881 2887 2896 2917 2926 2932 2941 3416 3422 3434 3440 3455 4657 4672 4690 5481 5490 5496 5502 5523 5547 5559 5604 6526 6532 6547 6553 6559 6565 6574 6673 8822 8876 8909 8939 10048 10054 11276 11285 11294
2B	2857 2869 2875 2881 2887 2896 2902 2908 2914 2920 2929 3401 3407 3416 3422 3428 3449 4660 4672 4681 4690 4693 5490 5496 5502 5508 5520 5526 5550 5574 5595 5607 5613 5619 6526 6532 6562 6568 6577 6655 6661 6667 8819 8834 8864 10009 10024 11279 11333 11339
2C	2857 2863 2866 2884 2893 2902 2908 2914 2920 2926 2932 3401 3407 3428 3434 3440 3449 3455 4657 4660 4681 4693 5481 5487 5508 5514 5520 5526 5550 5562 5574 5586 5604 6535 6541 6547 6553 6562 6568 6577 6586 8819 8834 8882 8939 10009 10024 10054 11276 11333 11372
3	2893 2935 4693 5556 6583 6589 8846 8954 10087 11318 11336 11360 13267 13321 17910

3A	2854 2860 2869 2875 2881 2887 2896 2905 2911 2923 2959 3404 3416 3422 3431 3443 3452 4672 4684 4690 5484 5490 5496 5502 5511 5517 5568 5580 5601 5625 6526 6532 6538 6544 6550 6556 6607 6613 6619 6649 8837 8861 8900 8942 10045 10057 11309 11324 11330
3B	2851 2854 2872 2878 2884 2902 2908 2914 2968 3401 3407 3413 3419 3425 3431 3437 3443 4657 4681 5493 5499 5505 5514 5520 5526 5550 5562 5580 5601 6529 6538 6544 6559 6568 6577 6595 6625 6631 8822 8852 8861 8879 8957 10024 10039 11285 11291 11327 11372
3C	2851 2860 2866 2878 2905 2950 2974 2980 2986 3404 3410 3419 3425 3452 4684 5484 5514 5562 5568 5586 5637 5643 6550 6556 6595 6658 6664 6670 8837 8852 8894 8915 10039 11291 11303 11324 11378
4	6565 8873 13300 17904
4A	2926 2953 3437 3491 4672 5547 5559 6526 6532 6616 8816 8837 8858 10039 10081 11282 11318
4B	2866 2893 3443 5481 5574 5604 6553 6577 6598 10063 11324
5	8870 8885 10012 11312 11327 13354 17949 17967
5A	2986 3452 5577 5583 6544 6664 8822 8915 11288
5B	2911 2968 3431 3488 5511 5568 5625 6550 6595 8912 10093
5C	2905 3452 5583 6544 8822
5D	2899 2971 3482 5526 5550 6535 6547 8843 10048
6	8840 11381 13291 17943
6A	2872 2923 2947 3001 3479 4657 4675 5484 5580 5601 6607 6613 6658 8891 8906 8948 10006 10051 10081 11321 11357
6B	2857 2920 3479 3488 5502 5595 5625 6607 6613 6619 8864 8885 10021 10093 11339 11366 17955
6C	2881 2956 3473 4651 5550 5580 6544 6631 8834 8918 10015
6D	2866 2884 3416 5490 5520 5568 5574 5631 6550 6568 6577 6595 8882 8957 11309 11372
6E	2854 2872 2917 3001 3443 4657 4675 5514 5526 5550 6583 6655 6661 8861 8906 8909 10036 10051 10084 11357 11363
6F	2926 2941 3434 3440 5496 5508 6526 6667 8864 8939 10060 11279 11366
6G	2869 2875 2890 2896 2899 2902 2911 2917 2938 2953 2962 2968 2971 2977 2983 2989 2995 3413 3422 3431 3437 3446 3449 3464 3482 4651 4663 4669 4672 4690 4696 5481 5487 5493 5499 5505 5511 5517 5523 5547 5553 5559 5565 5571 5577 5583 5592 5598 5604 5610 5616 5622 5628 5634 5640 6529 6535 6541 6547 6553 6559 6565 6574 6580 6586 6598 6604 6610 6616 6622 6628 6634 6649 6652 6673 6682 8816 8825 8831 8843 8858 8867 8870 8873 8888 8912 8960 10018 10054 10063 11276 11282 11288 11294 11300 11306 11315 11369 13270 13276 17913
7	5508 6586 8888 11285 13354
7B	2863 2965 3455 5577 5583 6652 8906 10009
7C	2950 3407 5592 6568 6604 8834 10081 11294
7D	2998 5481 10096
7E	2887 3485 5520 6580 6628 8864 11306
7F	2956 3461 5547 5568 6622 8846 8960
9	4696 5583 6553 8846 8852 10018 11339
9B	2860 2905 2929 3401 3419 3425 3476 4660 5484 5508 5523 5565 6538 6547 6598 6622 8819 8837 8861 8906 10009 10024 10039 11393
9C	2851 3404 3461 4675 5481 6580 8873 10042 11279 11312
9D	3016 3404 5592 6535 8873 11312
10	4696 5454 5604 6553 8819 8834 10006 10012 11333 11390 13285 17910

10A 2866 2875 2911 2944 2956 2992 3449 3470 5472 5475 5484 5490 5496 5565 5631 6535 6580 6604 8855 8876 10066 11357 11363 11375
10B 2854 2860 3404 3467 3488 4651 4666 4681 4690 4693 5460 5466 5553 5568 5583 6547 6574 6598 8837 8903 8939
10C 2926 2965 3491 4660 4669 5457 5481 5487 5502 5562 5595 6541 6556 6568 8867
10D 2893 2935 3419 3425 3458 4666 4669 4678 5472 5475 5484 5490 5496 5586 5625 6535 6544 6562 8858 8900
10E 2869 2944 2992 3446 3473 4651 4666 4684 5460 5481 5559 5577 6547 6598 8843 8954 11276
10F 2950 4663 5451 5526 6673 8945 10042
11B 2851 2878 3004 3019 3410 3428 3434 3443 4672 5451 5463 5469 5508 5514 5523 5571 6538 6550 6559 6565 8822 8885 8912 10045 10093 11288 11306 13312 17964
12 3440 5568 10054 17901
12A 2950 5604
12C 2920 2980 3401 3464 4693 5460 5484 5490 5496 5502 5589 5613 6535 6571 6592 6622 6628 8816 8948 8957 10021 10039 11324
12D 3407 5562 6673 8876 10015
12E 2860 2956 2998 3461 3488 4681 5454 5475 5481 5487 5583 5595 5604 6547 6553 6598 8852 8873 10063 10090 11381 11393
12F 2893 2956 2965 2998 3461 3488 5451 5475 5508 5556 5583 5604 6532 6553 8873 8894 10090 11297
12G 2875 2956 2998 3461 3488 5484 5523 5559 5646 6526 6616
12H 2956 2998 3461 3488 5451 5583
12J 2860 2902 2926 2965 3419 5481 5496 5619 6535 6547 8954 11381 11384
13 13318 17913
13A 10048 17967
13B 10048 17967
13C 2863 2869 2992 3413 3458 3473 5490 5514 5553 5571 5577 6541 6556 6562 6568 6580 8819 8834 8843 8939 10042 11327 11375 13309
13D 2914 2983 3425 3467 4660 5460 5562 6622 6628 6673 8867 8912 8957 10084 11318
13E 2851 3491 4651 4663 5481 5583 5604 6553 6577 8858 11303 17967
13F 2851 2956 2998 3446 3476 4651 4663 5454 5481 5583 5604 6547 6553 8831 8858 8864 10081 11321 11330 17967
13G 2872 2971 3016 3434 3470 4675 5469 5475 5574 6586 6613 8822 8885 8900 10006 10021 10036 11369
13H 2899 2965 3455 3485 4657 5463 5472 5484 5547 6598 8825 8906 10036 10045 11282 11300 13267
13I 2860 2878 2887 3419 4678 4693 5451 5466 5496 5523 6574 8873 10051
13J 2857 2863 2878 2890 2920 3410 3428 3458 4684 4696 5451 5454 5559 5568 5577 6550 6559 6580 8816 8843 10012 10018 10042 11276
13K 2863 2932 3004 3019 3401 3458 3464 4663 4672 5463 5481 5547 5577 5604 6547 6553 6580 8843 8849 8945 10009 10018 10042 10060 11339 11366 13309
13M 2908 2977 3437 3449 4660 4690 5463 5502 6574 6628 8837 8867 8903 10066 11378
13N 2986 3443 5457 5508 6604 8828 10093
14 2851 2878 3446 3461 3479 5526 5604 6580 6628 8822 8855 8870 10045 10087 11360 13264 17946
14A 2950 3413 4678 6547 6553 8816 8894
14B 3488 4684 6535 6604 6673 8900 8954

14C	2887 3452 4684 6541 6586 8885 8912
14D	2950 3407 4693 5481 6559 6574 8843 8858
14E	3413 6565 6616 8891 8945
14F	3488 6526 6610 8825 8831
14G	2869 2944 4678 5481 5550 5580 8876 8957

VOLMET areas

VAFI	2860 3404 5499 6538 8852 10057 13261
VCAR	2950 5580 11315
VEUR	2998 3413 5505 6580 8957 11378 13264
VMID	2956 5589 8945 11393
VNAT	2905 3485 5592 6604 8870 10051 13270 13276
VNCA	3461 4663 5676 10090 13279
VPAC	2863 6679 8828 13282
VSAM	2881 5601 10087 13279
VSEA	2965 3458 5673 6676 8849 11387 13285

Worldwide allotment areas

W I	3010 4654 4687 5529 5532 5535 5541 6637 6643 8921 8924 8930 8936 10027 10030 10069 10072 10078 11345 11351 13324 13327 13333 13336 13342 13345 13351 17916 17922 17931 21940 21946 21952 21958 21967 21973 21979 21988 21997
W II	3007 3013 3494 3497 4654 4687 5529 5538 5544 6637 6640 6646 8927 8933 8936 10027 10033 10075 11342 11348 11354 13330 13339 11354 13330 13339 13348 17919 17925 17934 17940 21964 21985
W III	3007 4687 6637 8921 8930 10072 10078 11342 11351 13324 13333 13342 13351 17916 17922 17928 17934 17940 21949 21970
W IV	3010 5535 5541 6643 8924 10030 10069 11345 13327 13336 13345 17919 17928 17937 21955 21976
W V	3013 5532 5538 5544 6640 6646 8927 8933 10033 10075 11348 11354 13330 13339 13348 17925 17931 17937 21943 21961 21982 21994

20.6 Frequencies for common use

AP27.208 The carrier (reference) frequencies 3023 kHz and 5680 kHz are intended for common use on a world-wide basis.

AP27.209 The use of these frequencies in any part of the world is authorized:

- aboard aircraft for

a) communications with approach and aerodrome control;

b) communication with an aeronautical station when other frequencies of the station are either unavailable or unknown;

- at aeronautical stations for aerodrome and approach control under the following conditions:

a) with mean power limited to a value of not more than 20 watts in the antenna circuit;

b) special attention must be given in each case to the type of antenna used in order to avoid harmful interference;

c) the power of aeronautical stations which use these frequencies in accordance with the above conditions may be increased to the extent necessary to meet certain operational requirements subject to coordination between the administrations directly concerned and those whose services may be adversely affected.

AP27.210 Notwithstanding these provisions, the frequency 5680 kHz may also be used at aeronautical stations for communication with aircraft stations when other frequencies of the aeronautical stations are either unavailable or unknown. However, this use shall be restricted to such areas and conditions that harmful interference cannot be caused to other authorized operations of stations in the aeronautical mobile service.

AP27.211 Additional particulars regarding the use of these channels for the above purposes may be recommended by the meetings of ICAO.

AP27.212 Frequencies 3023 kHz and 5680 kHz may also be used by stations of other mobile services participating in coordinated air-surface search and rescue operations, including communications between these stations and participating land stations. Aeronautical stations are authorized to use these frequencies to establish communications with such stations.

AP27.213 These channels may be used for A1A or A3E emissions, in accordance with special arrangements. Such channels shall not be subdivided.

AP27.214 All stations participating directly in coordinated search and rescue operations and using frequencies 3023 kHz and 5680 kHz shall transmit solely on the upper sideband except in the cases provided for in AP27.50 . ☺

GLOBE
WIRELESS®

QSLing Global Radio Network stations

Globe Wireless operates a worldwide network of radio stations for maritime data communications. Coast stations located in Hawaii (KEJ), San Francisco (KFS), Sweden (SAB),Newfoundland (VCT), New Orleans (WNU) and New Zealand (ZLA) are on the air. Additional stations in Bahrain (A9M), and Perth, Australia (VIP) are under construction, with more to follow.

Reception data from numerous receiving locations, worldwide, is needed to confirm the coverage area of the network, and especially the newer stations. For this reason, the Globe Wireless Engineering Department is requesting assistance from interested listeners.

Send in your reception reports and you will receive a handsome QSL card suitable for display in your radio shack. Every listener is eligible to receive one QSL card for each Globe Wireless coast station received and correctly reported. Reports are needed from ships at sea, as well as listeners on shore.

"We find reception reports from listeners extremely useful," said Rod Deakin, Chief Engineer, Globe Wireless. "They include valuable technical information and we are happy to send QSL cards in return."

Globe Wireless SITOR transmitters can be easily recognized. They broadcast a unique "free signal" pattern, followed by the station's call sign, when not otherwise in use. Similarly, available CW transmitters broadcast a repetitive "wheel" including the call sign and other information. The six traditional maritime HF bands - 4, 6, 8, 12, 16 and 22 megahertz - are utilized by Globe Wireless stations.

To be of maximum value to the Globe Wireless Engineering staff, reception reports should contain the following information:

☐ Date and Time (UTC) of your reception
☐ Call Sign (QRA) of the Globe Wireless network station heard
☐ Either the actual frequency (QRG), or ITU channel number
☐ Mode of transmission heard (SITOR, CW, etc.)
☐ Signal strength (QSA) and quality
☐ Any interference (QRM) heard on frequency, or on adjacent channels
☐ Did you hear traffic or idle signals? If traffic, whom were we working?
☐ Model number of receiver and type of antenna used
☐ Location (QTH) of your receiving station
☐ Any other comments

Include a complete mailing address with all reports so that we may send your QSL card by return post. Ships are requested to include either the address of the vessel's home port or the Radio Officer's personal address. Please send your reception reports for all Global Radio Network stations to:

Globe Wireless

Attn.: Engineering Department

One Meyn Road

Half Moon Bay, CA 94019 USA

Reception reports from radio listeners are appreciated at Globe Wireless' various maritime stations [*http://www.globewireless.com/swl.htm*].

21 Maritime Mobile Service regulations

21.1 Bands up to 4 MHz

In Region 1, frequencies assigned to maritime stations operating in the bands between 1606.5 kHz and 3800.0 kHz should, whenever possible, be in accordance with the following table:

1606.5 - 1625.0*	coast stations, NBDPT, DSC; channels spaced 0.5 kHz and frequencies paired with those marked * below
1635.0 - 1800.0**	coast stations, SSB; channels spaced 3.0 kHz and frequencies paired with those marked ** below; first channel = 1635.0 kHz
1850.0 - 1950.0	coast stations, SSB; channels spaced 3.0 kHz; first channel = 1851.0 kHz
1950.0 - 2045.0	ship stations, SSB; channels spaced 3.0 kHz; first channel = 1951.0 kHz
2045.0 - 2141.5**	ship stations, SSB; channels spaced 3.0 kHz and frequencies paired with those marked ** above; first channel = 2045.0 kHz
2141.5 - 2160.0*	ship stations, NBDPT, DSC; channels spaced 0.5 kHz and frequencies paired with those marked * above
2194.0 - 2262.5	ship stations, SSB; channels spaced 3.0 kHz; first channel = 2195.0 kHz
2262.5 - 2498.0	intership, SSB; channels spaced 3.0 kHz; first channel = 2263.0 kHz
2502.0 - 2578.0	ship stations, NBDPT; channels spaced 0.5 kHz; first channel = 2502.5 kHz
2578.0 - 2850.0	coast stations, NBDPT, SSB; channels spaced 0.5 kHz; first channel = 2578.5 kHz - or: channels spaced 3.0 kHz; first channel = 2579.0 kHz
3155.0 - 3200.0	ship stations, NBDPT; channels spaced 0.5 kHz; first channel = 3155.5 kHz
3200.0 - 3340.0	ship stations, SSB; channels spaced 3.0 kHz; first channel = 3201.0 kHz
3340.0 - 3400.0	intership, SSB; channels spaced 3.0 kHz; first channel = 3340.0 kHz
3500.0 - 3600.0	intership, SSB; channels spaced 3.0 kHz; first channel = 3500.0 kHz
3600.0 - 3800.0	coast stations, SSB; channels spaced 3.0 kHz; first channel = 3601.0 kHz

21.2 Shortwave bands

The most extensive frequency transition in the MMS during the nineties took place on 0001 UTC 01 JUL 1991. See the attached folders at the end of this reference book for the band plan. ☺

General disclaimer

The country designations used in this manual are those employed by UNO and its specialized agencies ICAO, ITU, WMO etc. They have solely a geographical significance and do not imply the expression of any political opinion whatsoever on the part of Klingenfuss Publications concerning the legal status or the sovereignty of any state, territory, area or city or of its authorities, or concerning the delimitation of its frontiers or boundaries.

22 Standard telegram format regulations and NATO routing indicators

22.1 Introduction

Radiotelegraphy is still used for many fixed circuits. The telegrams are transmitted in a standard telecommunication format.

Telegram examples given in this chapter are only intended to illustrate the correct formatting of telegrams. The texts are fictious. Groups such as NATO routing indicators, channel indicators, destination and origin indicators do not necessarily reflect current usage or routing arrangements in the telegraph offices concerned.

For service codes and abbreviations see chapter 23. For the message formats used in aeronautical and meteorological communication see our RADIO DATA CODE MANUAL.

22.2 Message format

A telegram comprises

- the heading, which shall include the information needed for identification and, if necessary, for the routing of the telegram;
- the address (including the service indication, if any);
- the text (including the signature, if any);
- the end-of-message signals.

First part: **HEADING**

The heading of a telegram consists of

- the numbering line, containing
    - the start signal *ZCZC* ;
    - the channel sequence number(s) consisting of the 3-letter channel indicator and the 3-figure message number on the channel;
    - the telegram identification group (consisting of up to 15 characters);

- the pilot line (where it is required), containing
    - the four-letter destination indicator (see 22.3);
    - the two-letter priority and tariff indicator (see 22.4);
    - the four-letter origin indicator (see 22.3);
    - the 3-figure number of chargeable words (taken from the preamble line);
    - the customer identification group (if any) (any combination of letters and/or figures, for accounting purposes);

- the preamble line, containing
    - the name of the office of origin as it appears in the first column of the List of Telegraph Offices;
    - the number of words. When the number of chargeable words is the same as the number of actual words, it shall be shown as a single number. When the number of chargeable words is different from the number of actual words, both shall be shown, separated by a fraction bar with the number of chargeable words first;
    - the date (2-figure group) and time (4-figure group) of handing in of the telegram;
    - the service instructions (if any).

Second part: **ADDRESS**

The address of a telegram consists of

- the service indications, if any;
- the address.

Third part: **TEXT**

The text of a telegram must be continuous and written in characters that have an equivalent in the standard teleprinter alphabet ITA2 (see chapter 17 in our RADIO DATA CODE MANUAL). A signature shall not be compulsory.

Fourth part: **END-OF-MESSAGE SIGNALS**

Ending signal *NNNN*

22.3 Destination indicators

A destination indicator must be assigned to each office directly concerned with the telegram retransmission system. Offices handling a large amount of international traffic should also be assigned a destination indicator. In each country at least one destination indicator (an "all others" indicator) must be chosen for offices not assigned their own destination indicator.

Each destination indicator consists of four letters. The first two letters characterize, in a uniform way, a particular destination country or a particular network in the destination country. The third and fourth letters characterize the office of destination in that country or network. A list of Telex Destination Codes (TDCs) and Telex Network Identification Codes (TNICs) is available on the Internet at *http://www.itu.ch/ituloc/itu-t/lists/tlx_26242.html* .

Particular combinations:

..MV	The combinations *MV* , *SV* , *XQ* and *YQ* as the third and fourth letters of indicators should preferably be reserved for the segregation of particular types of telegram at gateway cities or at major international telegraph offices
..SV	(see ..MV)
..XQ	(see ..MV)
..XX	Where there is only one indicator for all offices in a country, the last two letters should be *XX*
..YQ	(see ..MV)
...X	The last letter of an "all others" indicator will always be X
..ZZ	Destination indicators having *ZZ* as the third and fourth letters should be strictly reserved for automatic service advices, which are designed to trigger an automatic action at a connected telegram retransmission centre
XQXQ	The destination indicator *XQXQ* is reserved for use in emergency broadcast messages concerning a total system failure

A...	Austria
AA..	Australia
AB..	Albania
AD..	Yemen
ADAN	Aden
AF..	Afghanistan
AFKL	Kabul
AK..	Antigua and Barbuda
AN..	Angola
AR..	Argentina
AV..	Ascension
B...	Belgium
BA..	Bermuda
BC..	Benin
BD..	Botswana
BEAN	Antwerpen
BEB.	Brussels
BG..	Bulgaria
BI..	Guinea-Bissau
BJ..	Bangla Desh
BJCG	Chittagong
BJD.	Dhaka
BM..	Burma
BN..	Bahrain
BP..	Bophuthatswana
BR..	Brazil
BS..	Bahamas
BU..	Brunei
BV..	Bolivia (ENTEL)
BZ..	Belize
C...	Czech Republic and Slovakia
CA..	Canada (except TWX)
CB..	Chile (ENTEL)
CE..	Sri Lanka
CH..	Switzerland
CI..	Ivory Coast
CK..	Chile (TC)
CL..	Chile (Telex Chile)
CN..	China
CNDR	Dairen
CNKC	Kwangchow
CNQD	Qingdao
CNSH	Shanghai
CNTP	T'ai-pei
CNTT	Tientsin
CO..	Colombia
CP..	Cayman Islands
CR..	Costa Rica
CSP.	Prague
CT..	Chile (TEXCOM)
CU..	Cuba
CV..	Cape Verde
CX..	Ciskei
CY..	Cyprus
CYNC	Nicosia
CZ..	Chile (ITTCHL)
D...	Germany
DG..	Diego Garcia
DH..	Qatar
DI..	Dominican Republic (AACR)
DJ..	Jibuti
DK..	Denmark
DKCN	Copenhagen
DO..	Dominica
DR..	Dominican Republic (RCA)
DZ..	Algeria
E...	Spain
ED..	Ecuador
EG..	Equatorial Guinea
EI..	Ireland
EM..	United Arab Emirates (EMIRTEL)
ESBA	Barcelona
ESBL	Bilbao
ET..	Ethiopia
ETAD	Addis Ababa
F...	France
FA..	Faroe Islands
FG..	Guiana (French)
FJ..	Fiji
FK..	Falkland Islands (Malvinas) and Dependencies
FL..	Liechtenstein
FP..	Polynesia (French)
FRP.	Paris
G...	United Kingdom
GA..	Grenada
GBBD	Bradford
GBBM	Birmingham
GBGW	Glasgow
GBL.	London
GBMR	Manchester
GBPS	Portishead Radio
GD..	Greenland
GE..	Guinea
GECY	Conakry
GH..	Ghana
GK..	Gibraltar
GL..	Guadeloupe
GM..	Guam (RCA)
GO..	Gabon
GR..	Greece
GRAS	Athens
GU..	Guatemala
GV..	Gambia
GY..	Guyana
H...	Hungary
HI..	Haiti
HL..	Saint Helena
HM..	Hawaii (AACR)
HO..	Honduras
HQ..	Solomon Islands
HR..	Hawaii (RCA)
HUBU	Budapest
HW..	Hawaii (WUI)
HX..	Hong Kong
I...	Italy
IA..	Indonesia
IK..	Iraq
IKB.	Baghdad
IL..	Israel

ILHA	Haifa
ILJM	Jerusalem
ILT.	Tel Aviv
IN..	India
INB.	Mumbai
INCA	Calcutta
INMS	Madras
INND	Delhi
IR..	Iran
IRTN	Tehran
IS..	Iceland
ITBG	Bergamo
ITBI	Biella
ITBS	Brescia
ITMI	Milano
ITNA	Napoli
ITPS	Pesaro
ITR.	Rome
IW..	Mauritius
J...	Japan
JA..	Jamaica
JO..	Jordan
JPO.	Osaka
JPT.	Tokyo
K...	Korea (Republic of)
KA..	Cambodia
KC..	Saint Kitts and Nevis
KD..	Chad
KE..	Kenya
KG..	Congo
KI..	Kiribati
KN..	Cameroon
KO..	Comoros
KP..	Korea (Undemocratic People's Republic of)
KT..	Kuwait
LA..	Anguilla
LC..	Saint Lucia
LE..	Lebanon
LEBH	Beirut
LELE	Beirut
LETR	Tripoli
LI..	Liberia
LO..	Lesotho
LS..	Laos
LU..	Luxembourg
LY..	Libya
LYBE	Benghazi
M...	Morocco
MA..	Malaysia
MC..	Monaco
ME..	Mexico
MF..	Maldives
MG..	Madagascar
MH..	Mongolia
MI..	Malawi
MJ..	Mali
MK..	Montserrat
MN..	Marianas (Northern)
MO..	Mozambique
MQ..	Mauritania
MR..	Martinique
MS..	Marshall Islands
MT..	Malta (GTC)
MW..	Malta (TELEMALTA)
N...	Norway
NA..	Netherlands Antilles
NE..	Papua New Guinea
NF..	Niue Island
NG..	Nigeria
NGJS	Jos
NGKD	Kaduna
NGKN	Kano
NGL.	Lagos
NGMG	Maiduguri
NGZA	Zaria
NH..	Vanuatu
NI..	Niger
NINY	Niamey
NL..	Netherlands
NLAM	Amsterdam
NLRM	Rotterdam
NM..	New Caledonia and Dependencies
NOOO	Oslo
NP..	Nepal
NU..	Nicaragua
NV..	Norfolk Island
NZ..	New Zealand
OM..	Macao
OMMA	Macao
ON..	Oman
P...	Portugal
PA..	Panama (TRT)
PB..	Puerto Rico (TRT)
PCOO	Porto
PD..	Puerto Rico (AACR)
PE..	Peru
PG..	Panama (INTEL)
PH..	Philippines (PHILCOM)
PK..	Pakistan
PL..	Poland
PLGD	Gdynia
PLLO	Lodz
PLWA	Warsaw
PM..	Philippines (ITT Globe-Mackay Cable and Radio Corporation)
PN..	Philippines (ETPI)
PP..	Puerto Rico (WUI CARIB)
PS..	Philippines (CAPWIRE)
PT..	Puerto Rico (RCAC)
PU..	Philippines (Philippine Telegraph and Telephone Corporation)
PY..	Paraguay
QN..	Saint Pierre and Miquelon
R...	Romania
RC..	Central African Republic
RE..	Reunion
RG..	Cook Islands
RMBU	Bucharest
RS..	Singapore

RSSE	Singapore
RW..	Rwanda
RWKI	Kigali
S...	Sweden
SA..	South Africa (Republic of)
SB..	Samoa (American)
SD..	Sudan
SDK.	Khartoum
SDPS	Port Sudan
SE..	Sierra Leone
SF..	Finland
SFHE	Helsinki
SG..	Senegal
SGD.	Dakar
SJ..	Saudi Arabia
SM..	Somalia
SN..	Suriname
SO..	San Marino
SR..	El Salvador
ST..	Sao Tome and Principe
SU..	Commonwealth of Independent States
SUKV	Kiyev
SUM.	Moscow
SUOO	Odessa
SUTB	Tbilisi
SX..	Samoa (Western)
SY..	Syria
SYAL	Aleppo
SYD.	Damascus
SYLA	Lattakia
SZ..	Seychelles
TA..	Tanzania
TH..	Thailand
THBK	Bangkok
TL..	Tokelau Islands
TN..	Tunisia
TO..	Togo
TQ..	Turks and Caicos Islands
TR..	Turkey
TRIS	Istanbul
TS..	Tonga
TT..	Transkei
TV..	Tuvalu
UA..	Alaska (RCA)
UB..	United States of America (Graphnet Corporation)
UD..	United States of America (Western Union Telegraph Company)
UF..	United States of America (FTCC Telecommunications)
UG..	Uganda
UI..	United States of America (ITT)
UINY	New York
UN..	Egypt
UNAA	Alexandria
UNC.	Cairo
UQ..	United States of America (TWX)
UR..	United States of America (RCA)
URHU	Honolulu
UT..	United States of America (TRT)
UU..	Burundi
UUJU	Usumbura
UV..	Bourkina Faso
UTMI	Miami
UW..	United States of America (WUI)
UY..	Uruguay
VA..	Vatican City State
VAVS	Vatican City
VB..	Virgin Islands (British)
VC..	Venezuela
VM..	Venda
VN..	Virgin Islands (United States)
VQ..	Saint Vincent and the Grenadines
VT..	Viet Nam
VTHA	Hanoi
VTHO	Ho Chi Minh City
WB..	Barbados
WD..	Swaziland
WF..	Wallis and Futuna Islands
WG..	Trinidad and Tobago
WK..	Namibia
X...	INMARSAT
YE..	Yemen
YU..	Bosnia and Herzegovina, Croatia, Serbia and Montenegro, Slovenia
YUB.	Belgrade
YULJ	Ljubljana
YUZB	Zagreb
ZA..	Zambia
ZALU	Lusaka
ZR..	Zaire
ZV..	Nauru
ZW..	Zimbabwe

22.4 Priority and tariff indicators

Each priority and tariff indicator consists of two letters. The first letter characterizes the priority class and the second letter characterizes the tariff class of the telegram.

First letter: **priority class**

A	SVH telegrams

B	ETATPRIORITE telegrams
	OBS telegrams
	ordinary private telegrams with urgent transmission and delivery
	paid service advices
	press telegrams with urgent transmission and delivery
	RCT telegrams with urgent transmission and delivery
	service advices with urgent transmission and delivery
	service telegrams with urgent transmission and delivery
C	government telegrams
	ordinary private telegrams
	press telegrams
	RCT telegrams
	service advices
	service telegrams
	telegrams giving confirmation of delivery
H	letter telegrams (including government letter telegrams)

Second letter: **tariff class**

D	press telegrams with urgent transmission and delivery
J	POSTFIN telegrams
K	government telegrams where preferential rate is to be charged
L	letter telegrams
M	meteorological telegrams
N	non-chargeable telegrams
O	ordinary private telegrams
P	press telegrams
Q	telegrams involving special accounting features
R	RCT telegrams
U	telegrams (other than RCT and press telegrams) with urgent transmission and delivery
V	divided telegrams
X	for use by transit offices when inserting the pilot line on transit telegrams
Y	government full-rate telegrams
Z	government letter-rate telegrams

22.5 Examples on standard telegrams

Ordinary private telegram with service indication

zczc aoe262 ldb814 pld606
aasd co gbld 018
london/ld 18/16 22 1430

lx
harris 2462 southernhighway
sydney

congratulations on your promotion and best wishes for the future
john

nnnn

zczc	start signal
aoe262	channel sequence number: message number 262 on channel AOE
ldb814 ...	preceding channel sequence numbers: message number 814 on channel LDB; message number 606 on channel PLD
aasd	destination indicator: Australia, Sydney
c	priority indicator: class C, ordinary private telegram
o	tariff indicator: class O, ordinary private telegram
gbld	origin indicator: United Kingdom, London
018	number of chargeable words: 18
london/ld	name of the office of origin as it appears in the first column of the List of Telegraph Offices: LONDON/LD
18	number of chargeable words: 18
/16	number of actual words: 16
22	date: 22nd day of the month
1430	time: 1430 legal time
lx	service indication: de luxe form
harris	address
congrats... ...	text
nnnn	ending signal

Multi-page telegram

zczc gwb608 mka296 azt044
gblv hl urny 076
new york 76/72 10 1826 page 1/50

lt
soapbox
liverpool

00503 your telegram modev6 of march 1 for graduate volunteers grateful for what you propose stop would only press for third category named if results of recruitment permitted but for practical reasons would be glad if they did so please telegraph prospects for export activity distribution arrangements

azt044 soapbox page 2/22

urgent x can we ship 5000 lbs k685 ex puk on braemar sailing london march 18 x cable mackenzies kampala immediately
smithco

nnnn

Service note for a situation report

```
zczc xq
gxxq bn frxq 000
paris 09 1031


lrls lpa130 pla444
lpb870 plb009
missing lpa040/043




nnnn
```

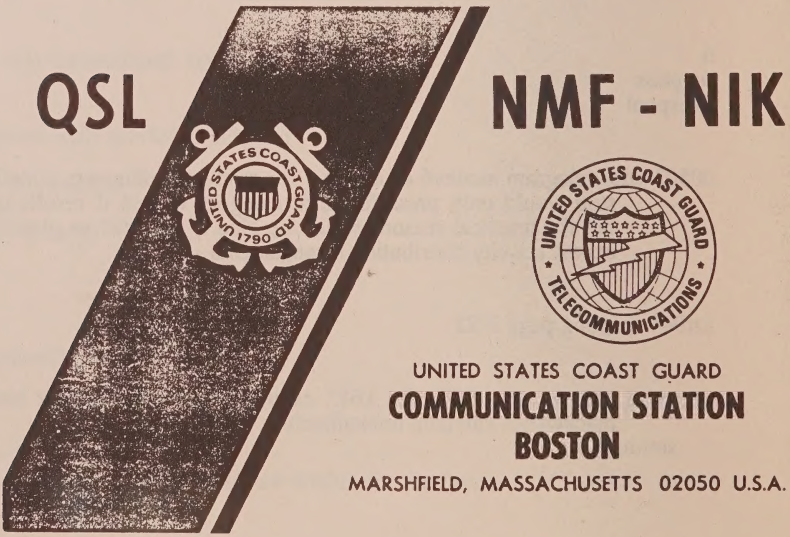
Service note requesting automatic re-run of one message

```
zczc xq
dpxq bn frxq 000
paris 21 0926


rrun bca165



nnnn
```



QSL

NMF - NIK

UNITED STATES COAST GUARD
COMMUNICATION STATION
BOSTON
MARSHFIELD, MASSACHUSETTS 02050 U.S.A.

QSL card of United States Coast Guard Station Boston, MA, United States of America

22.6 Examples on standard military teletype messages

As in most telex networks, you cannot deduce the location of the station actually monitored from the heading of the messages. The following fictive message could have been transmitted from 'RFFA' MOD Paris to 'RFQP' FF Jibuti on 16165.2 circuit [PQC].

For NATO routing indicators see chapter 22.7.

```
zczcpqc081
rr rfqpt
de rffaak 0124 2071722
znr uuuuu
r 251425z jul 96
fm distransit paris vincennes
to zen/comisar vincennes
info rfqpt/batserv djibouti
rfqpt/comfor djibouti
bt
d i f f u s i o n  r e s t r e i n t e
non protege
mca texte
nmr/8667/dtp/plan/r2 du 25/07/96
obj/convocation pour embarquement
ref/ om 218362/def/pmat/noa- 13/mai/96
af 2050/ffdj/em/b4/trp 16/jul/96
txt
titre: cpg rejoint chef fam sgt anceau herve
primo: anceau florence conjoint
mis en route par le(s) vol(s):
af 8040 le 01/aou/96 a 10:15 de roissy 2a
vers djibouti
muni(s) de -passeport valide + visa si non francais
secundo: convoque(s) le 31/jul/96 a 09:00

page deux rffaak 0124 non protege
d.t.p., fort neuf de vincennes, 94300 vincennes
nota - muni de la feuille de changement de residence
tertio . bagages avion accompagnes
en soute . 3 0 kg
voie maritime . 200 kg/ 2.00 m3 ou fret aerien differe 45 kg/ 0.27
m3 ( transitaire seulement )
imputation:chapitre:3404 art/para:32/11 code: toku 9 002 g
bt
#0124

nnnn
```

22.7 NATO routing indicators

NATO routing indicators are used in military telecommunications throughout the former Western World. They are applied in the standard teletype message format as well as in operational traffic or test tapes.

A routing indicator consists of four to seven letters. The first four or five letters indicate the location, while the rest indicates the addressed military unit or sub-unit. The first four letters are decoded according to the following table:

First letter		Second letter	Third letter	Fourth letter
Type of use		**Country**	**Operation area**	**Force service**
A		Australia	East Asia	Army
B		Commonwealth		Army
C		Canada	Central North America	Army
D		Denmark	United Kingdom, Iceland	Army
E		Spain	Eastern North America	Army
F		France	Continental Europe	Army
G		Germany		Army
H		United States of America	Central South Pacific	Army
I		Italy		Navy
J		Argentina		Navy
K		Greece	Alaska, Aleutian Islands	Navy
L		Luxembourg	Caribbean, South America	Navy
M		ASEAN	South East Asia	Navy
N		Netherlands		Navy
O				Navy
P		Portugal		Air Force
Q	Reserve strategic	Belgium	Middle East	Air Force
R	Strategic			Air Force
S		South Africa (Rep. of)	Western Asia	Air Force
T		Turkey	Iberia, Northwest Africa	Air Force
U	Tactical	United States of America		Air Force
V			South Africa	Air Force
W			Western North America	Joint
X				Joint
Y		Norway	Australia	Joint
Z		New Zealand		Joint

Examples (see chapter 7):

- RFFLBCF: Strategic French Army in Continental Europe (sub-unit BCF of FF Toulon, F)
- RPTI: Strategic Portuguese Navy in Iberia (PN Ponta Delgada, AZR)
- UBDA: Tactical British Army in the Commonwealth (major switching centre during annual British military exercises) ☺

23 Service codes and abbreviations used in gentex and telex operation

A	Service telegrams *or* advices
ABS	Telegraph office closed
ADD	Please input your international telex number
ADRS	Address
AMPLIATION	Telegram sent a second time
ANH	Congestion
ANUL …	Delete …
BK	I cut off
BL	Holding
BL … SVP	Please hold …
BMC	No end of message or end of transmission received, therefore message cancelled
BR TR …	Bad transmission on …
CALL NR	National call number of a gentex office
CCT … IN	I have restored circuit No. …
CCT … IN SVP	Please restore circuit No. …
CCT … OUT	I have taken circuit No. … out of service
CCT … OUT SVP	Please take circuit No. … out of service
CI	Conversation impossible
CK	Please check number of words
CLA	Class of telegram
CONFERENCE	Franking privilege telegrams (ITU)
CRD …	The connection is released after selection on circuit No. …
CRV	How do you receive?
CSR	I am receiving your calling signal
CTF	Correction to follow
DBL	Double word(s)
DEB	Overflow position
DER	Out of order
DERA	Machine faulty
DER CCT	Circuit faulty
DER MOM	Bad reception, do not cut off, we are testing the line
DERPS	Position equipment faulty
DERR	Fault now cleared
DER REG	Register does not operate
DER TAPE	Your perforated tape is faulty
DER VF …	Fault on voice-frequency system …
DETR …	I am re-routing to … *or* Re-route to … *or* Alternative route?
DEVD	Deviation of distributor speed at your end
DEVS …	Speed deviation is … %
DF	You are in communication with the called subscriber
… DIS …	The distortion on … is … %
DS …	Distribution switched over to …
DTE	Date of handing-in
EDIS …	The transmitter distortion is … %
ETA	Government telegrams
ETATPRIORITE	Government telegrams *or* telegrams relative to the application of the United Nations Charter
FAXx	Facsimile delivery (*x* = *facsimile number*)
FMT	Format error
FVS	Fives
GENTEX	International switched network for the public telegram service
IAB	Invalid answerback from destination
ICI …	Here is …

IMA	Input message acknowledgement
IND	Answer-back code
INF	Subscriber temporarily unobtainable, call the information service
INQ	Position specializing in the handling of service notes and advices
ITD	Input transaction accepted for delivery
ITL	I transmit later
JFE	Office closed because of holiday
Jx	Period of retention of radiotelegrams at land stations (x = *number of days*)
LDE	Maximum acceptable message length or duration has been exceeded
LOOP …	I have looped circuit …
LOOP … SVP	Please loop circuit …
LT	Letter telegrams
LTF	Government letter telegrams
LX	De luxe form
LXDEUIL	De luxe form of condolence
MAR …	The margin is … %
MEET …	Meet me on circuit No. …
MNS	Minutes
MOM	Please wait!
MOM PPR	Please wait! I have paper trouble
MUT	Mutilated
NA	Correspondence with this subscriber is not admitted
NA BK	Correspondence with this telegraph office is not admitted. I cut off
NARQ …	Multiplex … unprotected; please re-establish automatic request for repetition (ARQ)
NBL …	Clearing …
NBL … SVP	Please clear …
NC	No circuit
NCFM …	No call-confirmation signal on …
NCH	Number changed
NCS …	No call-connected signal from …
NDER	No fault found
NDN	Non-delivery notification
NI	No line identification available
N IND	I am not receiving your answer-back code
NOT R	Not received
NP	The called number is not *or* no longer in use
N PER A	I am not receiving your permanent start polarity signal
N PER Z	I am not receiving your permanent stop polarity signal
NPS	I am not receiving your proceed-to-select signal
NR	Indicate your call number *or* my call number is …
OBS	Meteorological telegrams
OCC	Busy
OCC OCC …	Permanent busy signal from …
O/D	Telegraph office of destination
OMTD	Omitted
O/O	Telegraph office of handing-in
OPH …	Out of phase on system …
PER A …	Permanent start polarity on …
PER A … SVP	Please send permanent start polarity on …
PER Z …	Permanent stop polarity on …
PER Z … SVP	Please send permanent stop polarity on …
PERC …	Permanent call on …
PH …	Please phase system …
POSTFIN	Postal financial services telegrams
PPR	Paper
QDIS …	Please mesure distortion on …
Q DIS A	Is there bias distortion (prolonged start polarity) on the received signals?
Q DIS Z	Is there bias distortion (prolonged stop polarity) on the received signals?

QGA	May I transmit?
QOK	Do you agree?
QRCS	Are your receiving my calling signal?
QREF	Please give reference number
QRES	Please report result
RAFSO	Second application
RAP	I shall call you again
RAP … MNS	I shall recall you in … minutes
RAP … MNS SVP	Please call me in … minutes
RCT	Telegrams concerning persons protected in time of war by the Geneva Conventions of 12 August 1949
RDI	Redirected call
REF	Reference of the message delivered to the telex side from a conversion facility for telex/teletex interworking
REI	Address validation failure / non-compliant answerback received
RES …	Here is the result of test on …
RFC …	I am receiving errors in 5-unit code. Please check channel No. …
RMUT …	I am receiving garbled signals on multiplex channel … Please check your 7-unit code
ROUTE	Route to … *or* I am routing for … *or* Route?
RPFR	Please prepare your reperforator
RPFR TXT	Prepare your reperforator because of long or difficult text or because of telegrams having the same text
RPT AA …	Repeat all after …
RPT AB …	Repeat all before …
RPT ALL	Repeat the whole telegram
RPT BN …	Repeat all between … and …
RPT SRL NR …	Repeat reference number given by the transmitting office …
RPT TG NR	Repeat telegram number
RPT TXT	Repeat text
RPT WA …	Repeat word after …
RPT WB …	Repeat word before …
RQFS …	Your repetition cycle transmission contains 7-unit code faults. Please check channel No. …
RS …	Reception switched over to …
RSBA	Retransmission still being attempted
SIG 1/1 SVP	Please send 1:1 signals
SIG 2/2 SVP	Please send 2:2 signals
SRL NR	Reference number given by a gentex transmitting office
SS …	Storage switched over to …
SSSS	Change of alphabet
SVH	Telegrams relating to the safety of life
SVIN	Service indication
SVP	Please
TAX	What is the charge *or* The charge is …
TCHN	Technical service *or* I shall advise the technical service
TELEX	Subscriber's telegraph service enabling users to communicate directly and temporarily with one another by means of start-stop apparatus
TESTD … SVP	Please send test message with … % distortion on …
TEST MSG	Please send a test message
TFx	Telephone delivery (x = *telephone number*)
TG	Telegram
TG NR …	Telegram number given by the handing-in office …
THRU	You are in communication with a telex position
TLXx	Telex delivery (x = *telex number*)
TMA	Maximum number of addresses exceeded
TNS	Tens
TPLE	Triple word(s)
TPR	Teleprinter
TRAS …	Please send alpha signal on multiplex channel …

TRBS ...	Please send beta signal on multiplex channel ...
TRS ...	Transmission switched over to ...
TTX	Designation of the conversion facility (CF) for telex/teletex interworking
TTXx	Teletex delivery (*x* = *teletex number*)
URGENT	Urgent transmission and delivery
UTCOD	Use the gentex code
VAL	Validation response
VERED	Please check the transmitter distortion
VERM	Please check the margin
VERS	Please check the speed
VERX ...	Please check subscriber No. ...
W	Word(s)
WEFXU	Waiting reply to our service advice
WRU	Who is there?
XXXXX	Error signal
ZKWA ...	The received signals have ... % bias (start polarity prolonged)
ZKWZ ...	The received signals have ... % bias (stop polarity prolonged)
+?	I have finished my transmission. Do you wish to transmit? ☺

Historic sugar cane crushing wheel at Medine Sugar Estate, Mauritius, then running at approximately 100 rpm. Bel Ombre, in the southeast of the island, was the very first sugar factory to install the horizontal cane crushing mill in 1806. Originally, cane was crushed by vertical cylinders rotated by oxen; this can be seen in the reconstruction of an early sugar factory at Domaine Les Pailles south of the capital city Port Louis. During the 19th century, a narrow-gauge railway system with British-made steam engines connected the cane fields with the sugar factories, and up to 1940 - 1950 there were still a few trains providing slooooooooow passenger services. Old Royal Navy Mauritius and Singapore QSL cards from 1972/1973 (see page 569) are now historic as well! This picture was taken during our 1996 monitoring mission in Mauritius and Rodrigues.

24 Abbreviations

This list contains both name and traffic abbreviations. The latter are used both in the traffic between radio stations, and in the "details" column of the "Frequency list of utility stations" (chapter 3.3).

For abbreviations used in aeronautical telecommunication please refer to chapter 8 in our RADIO DATA CODE MANUAL.

For a reverse list giving countries and the corresponding ITU symbols see chapter 4.

Contrary to the so-called "politically correct" official allocation, we refer to the real situation and, by consequence, we use throughout our publications

CHN	for the People's Republic of China;
CIS	for the Commonwealth of Independent States;
MYA	for Myanmar;
NLD	for Netherlands;
SLK	for Sri Lanka;
SRB	for Serbia and its satellite state Montenegro;
TAI	for Taiwan (Republic of China).

A	Arabic (see chapter 18.16 in our RADIO DATA CODE MANUAL, and title 31 on CD 1 of our COMPACT DISC RECORDING OF MODULATION TYPES)
AA	Aerolineas Argentinas
AA	All after ...
AA	Anadolu Ajansi
AAA	Shared throughout the world
AAB	Shared by several countries, but in a restricted area of the world
AAF	Argentine Air Force
AB	All before ...
ABT	About
ABW	Aruba
ACARS	Aircraft Communication and Reporting System (see title 14 on CD 1 of our COMPACT DISC RECORDING OF MODULATION TYPES)
ACG	Argentinian or Australian Coast Guard
ACT	Australian Capital Territory
ADM	Agua de Maputo
ADS	Address
AEROFLOT	Russian Federation's Airlines
AF	Audio frequency
AFB	Air Force Base
AFC	Area Forecast Centre
AFG	Afghanistan
AFI	Africa MWARA
AFS	South Africa (Republic of)
AFTN	Aeronautical Fixed Telecommunication Network
AGL	Angola
AGN	Again
AHE	Association Humanitaire Equilibre
AIA	Anguilla
AIOC	Azerbaijan International Operation Co
AIR	Aeronautical Fixed Station
AIREP	Report of operational and/or meteorological information by an aircraft (see chapter 3.2 in our RADIO DATA CODE MANUAL)
AL	Alabama
ALB	Albania

ALG	Algeria
ALIS	Automatic link set-up simplex ARQ teleprinter system of ROHDE & SCHWARZ according to WAVECOM (see advertisement at the end of this book, chapter 18.2 in our RADIO DATA CODE MANUAL, and title 10 on CD 2 of our COMPACT DISC RECORDING OF MODULATION TYPES)
ALIS-2	Automatic link set-up simplex ARQ teleprinter system of ROHDE & SCHWARZ according to WAVECOM (see advertisement at the end of this book)
ALS	Alaska
ALTA	Alberta
AM	Amplitude modulation
AMDAR	Report of aircraft meteorological data (see chapter 3.3 in our RADIO DATA CODE MANUAL)
AMS	Aeronautical Mobile Service
AMS	Amsterdam and Saint Paul
AMSS	Aeronautical Mobile Satellite Service
AMTOR	Amateur microprocessor teleprinting over radio system according to CCIR 476-4 (see chapter 18.36 in our RADIO DATA CODE MANUAL)
AMVER	Automated mutual-assistance vessel rescue system
AN	Argentine Navy
ANAL	Analysis
AND	Andorra
ANI	Adventure Network International
ANNS	Announces
ANS	Answer
ANT	Antenna
APA	Austrian Press Agency
APO	Army or Air Force Post Office
AR	Arkansas
AR	End of transmission (.-.-. *to be sent as one signal)*
ARCO	Atlantic Richfield Co
ARFOR	Aviation forecast in figure code prepared for a specific area (see chapter 3.4 in our RADIO DATA CODE MANUAL)
ARG	Argentina
ARM	Armenia
ARQ	Synchronous transmission and automatic repetition teleprinter system (in general)
ARQ-E	Single-channel ARQ teleprinter system according to UNIVERSAL and WAVECOM (see advertisements at the end of this book, chapter 18.3 in our RADIO DATA CODE MANUAL, and title 18 on CD 2 of our COMPACT DISC RECORDING OF MODULATION TYPES)
ARQ-E3	Single-channel ARQ ITA3 teleprinter system according to UNIVERSAL and WAVECOM (see advertisements at the end of this book, chapter 18.3 in our RADIO DATA CODE MANUAL, and title 19 on CD 2 of our COMPACT DISC RECORD-ING OF MODULATION TYPES)
ARQ-M2	Multiplex ARQ teleprinter system with 2 data channels according to CCIR 342-3 (see chapter 18.4 in our RADIO DATA CODE MANUAL)
ARQ-M2-242	Multiplex ARQ teleprinter system with 2 data channels according to CCIR 242-2 (see chapter 18.4 in our RADIO DATA CODE MANUAL and title 20 on CD 2 of our COMPACT DISC RECORDING OF MODULATION TYPES)
ARQ-M4	Multiplex ARQ teleprinter system with 4 data channels according to CCIR 342-3 (see chapter 18.4 in our RADIO DATA CODE MANUAL)
ARQ-M4-242	Multiplex ARQ teleprinter system with 4 data channels according to CCIR 242-2 (see chapter 18.4 in our RADIO DATA CODE MANUAL and title 22 on CD 2 of our COMPACT DISC RECORDING OF MODULATION TYPES)
ARQ-N	Single-channel ARQ teleprinter system according to WAVECOM (see advertisements at the end of this book, chapter 18.5 in our RADIO DATA CODE MANUAL, and title 24 on CD 2 of our COMPACT DISC RECORDING OF MODULATION TYPES)

ARQ6-90	6-character-blocks simplex ARQ teleprinter system according to UNIVERSAL and WAVECOM (see advertisements at the end of this book, chapter 18.6 in our RADIO DATA CODE MANUAL, and title 15 on CD 1 of our COMPACT DISC RECORDING OF MODULATION TYPES)
ARQ6-98	6-character-blocks simplex ARQ teleprinter system according to UNIVERSAL and WAVECOM (see advertisements at the end of this book, chapter 18.6 in our RADIO DATA CODE MANUAL, and title 16 on CD 1 of our COMPACT DISC RECORDING OF MODULATION TYPES)
ARS	Saudi Arabia
AS	Waiting period (.-... *to be sent as one signal)*
ASC	Ascension
ASEAN	Association of South-East Asian Nations
ASECNA	Agence pour la Securite de la Navigation Aerienne en Afrique et a Madagascar
ATA	Antarctic
ATCC	Agence Telegraphique Centrale de Coree
ATG	Antigua and Barbuda
ATM	Air traffic management
ATN	Aeronautical Telecommunication Network
ATN	Netherlands Antilles
ATU	Arab Telecommunication Union
ATU-A	Arabic ATU alphabet (see chapter 18.17 in our RADIO DATA CODE MANUAL, and title 14 on CD 2 of our COMPACT DISC RECORDING OF MODULATION TYPES)
AUS	Australia
AUT	Austria
AUTOSPEC	Automatic Single Path Error Correcting teleprinter system according to WAVECOM (see advertisement at the end of this book, chapter 18.7 in our RADIO DATA CODE MANUAL, and title 28 on CD 2 of our COMPACT DISC RECORDING OF MODULATION TYPES)
AWS	Air Weather Service
AZ	Arizona
AZE	Azerbaijan
AZR	Azores
B	Brazil
BA	Belgian or British Army
BAF	Belgian or Brazilian Air Force
BAH	Bahamas
BAS	British Antarctic Survey
BASMS	Basic automated spectrum management system
BATELCO	Bahrain Telecommunications Company
BATHY	Report of bathythermal observations (see chapter 3.5 in our RADIO DATA CODE MANUAL)
BBA	Balkan Bulgarian Airlines
BC	British Columbia
BC	Broadcast
BD	Bad
BD	Baud
BDI	Burundi
BDZ	Banque du Zaire
BEL	Belgium
BEN	Benin
BER	Bermuda
BFA	Bourkina Faso
BGD	Bangla Desh
BGS	Bundesgrenzschutz
BHR	Bahrain
BHU	Bhutan
BIH	Bosnia and Herzegovina
BIO	British Indian Ocean Territory
BIPM	Bureau International des Poids et des Mesures

BK	Signal used to interrupt a transmission in progress
BKA	Bundeskriminalamt
BLR	Belarus
BLZ	Belize
BN	All between ... and ...
BN	Brazilian or Bulgarian Navy
BNDVB	Bankrottdienst-Verbindungsbüro
BOL	Bolivia
BOT	Botswana
BQ	A reply to an RQ
BRB	Barbados
BRU	Brunei
BSH	Bundesamt für Seeschiffahrt und Hydrographie
BT	British Telecom
BT	Signal to mark the separation between different parts of the same transmission (-...- *to be sent as one signal)*
BTR	Better
BTTB	Bangla Desh Telegraph and Telephone Board
BUL	Bulgaria
BUOY	Report of buoy observations (see chapter 3.6 in our RADIO DATA CODE MANUAL)
C	Yes
CA	California
CAAC	Civil Aviation Administration of China
CAF	Central African Republic
CAN	Canada
CAP	Civil Air Patrol
CAR	Caribbean MWARA
CAR	Caroline Islands
CBG	Cambodia
CCG	Canadian Coast Guard
CCIR	International Radio Consultative Committee
CCITT	International Telegraph and Telephone Consultative Committee
CCT	Circuit
CD	Compact Disc
CD-ROM	Compact Disc Read-Only-Memory
CEP	Central East Pacific MWARA
CEU	For flights within Central Europe
CF	Canadian Forces
CFM	Confirm (*or* I confirm)
CH	Channel
CHF	Swiss Franken
CHL	Chile
CHN	China
CHR	Christmas Island
CIRM	Centro Internazionale Radio Medico
CIS	Commonwealth of Independent States
CISAF	Commonwealth of Independent States Air Force
CISN	Commonwealth of Independent States Navy
CIS-11	Commonwealth of Independent States' 11-bit teleprinter system according to WAVECOM (see advertisement at the end of this book, chapter 18.8 in our RADIO DATA CODE MANUAL, and title 25 on CD 2 of our COMPACT DISC RECORDING OF MODULATION TYPES)
CIS-14	Commonwealth of Independent States' 14-bit teleprinter system according to WAVECOM (see advertisement at the end of this book and chapter 18.8 in our RADIO DATA CODE MANUAL)
CK	Check
CKH	Cook Islands
CL	I am closing my station
CLG	Calling

CLM	Colombia
CLR	Clear
CME	Cameroon
CN	Chilene or Colombian Navy
CNA	Central News Agency Inc
CNR	Canary Islands
CNS	Communications, navigation, surveillance
CO	Colorado
COG	Congo
COL	Collate (*or* I collate)
COM	Comoros
COMB	Combination of telephony and telegraphy audible within a 4 kHz bandwidth (for example B9W) (see chapter 16 in our RADIO DATA CODE MANUAL)
COQUELET	8- or 13-tone multi-frequency-shift keying teleprinter system according to WAVECOM (see advertisement at the end of this book, and chapter 18.10 in our RADIO DATA CODE MANUAL)
COR	Correction
CP	Capitaneria di Porto
CP	Computer product
CP	General call to two or more specified stations
CPV	Cape Verde
CQ	General call to all stations
CRO	Crozet Archipelago
CROSS	Centre Regional Operationnel de Surveillance et de Sauvetage
CRS	Compagnie Republicaine de Securite
CS	Call sign
CT	Connecticut
CTI	Ivory Coast
CTR	Costa Rica
CUB	Cuba
CVA	Vatican City State
CW	Continuous wave (Morse code) (see chapters 20 and 21 in our RADIO DATA CODE MANUAL, and titles 2 and 3 on CD 1 of our COMPACT DISC RECORDING OF MODULATION TYPES)
C+W	Cable and Wireless Ltd
CWP	Central West Pacific MWARA
CYM	Cayman Islands
CYP	Cyprus
CZE	Czech Republic
D	Germany
DA	Danish Army
DAF	Danish or Dutch Air Force
DAT	Digital Audio Tape
DBL	Double
DC	District of Columbia
DCT	Direct
DD	Data decoder
DDD	Used to identify the transmission of the distress message by a station not itself in distress
DE	Delaware
DE	From
DEM	German Mark
DF	Your bearing at … hours was … degrees, in the doubtful sector of this station, with a possible error of … degrees
DGA	Diego Garcia
DIF	Different
DJI	Djibouti
DLD	Delivered
DM	Danish Marine
DM	German model (20 levels, 14 km)

DMA	Dominica
DN	Dutch Navy
DNK	Denmark
DO	Bearing doubtful. Ask for another bearing later (*or* at ... hours)
DOC	Department of Conversation
DOM	Dominican Republic
DOSC	Department of State Communications
DR	Dear
DRK	Deutsches Rotes Kreuz
DSB	Double sideband (see title 4 on CD 1 of our COMPACT DISC RECORDING OF MODULATION TYPES)
DSC	Digital Selective Calling
DSP	Digital Signal Processing
DTG	Date-time group
DTRE	Direction des Telecommunications des Reseaux Exterieurs
DTS	Droit de tirage special
DUP-ARQ	Hungarian diplomatic simplex ARQ teleprinter system according to WAVECOM (see advertisement at the end of this book, chapter 18.11 in our RADIO DATA CODE MANUAL, and title 26 on CD 2 of our COMPACT DISC RECORDING OF MODULATION TYPES)
DUP-ARQ-2	Diplomatic ARQ teleprinter system according to WAVECOM (see advertisement at the end of this book)
DUPE	This is a duplicate message
DW	Deutsche Welle
DWT	Deadweight tonnage
E	East
E	Embassy
E	English
E	Spain
EA	East Asia MWARA
EA	Ethiopian Airlines
ECMWF	European Centre for Medium-Range Weather Forecasts
E E E	Error signal
EGY	Egypt
EHF	Extreme high frequency
EKDMC	East Kasai Diamond Mining Co
EL	Element
EN	Egyptian or Equadorian Navy
ENC	Electronic nautical chart
ENDIAMA	Empresa Nacional Diamantos do Angola
EQA	Ecuador
ER	Here ...
ERI	Eritrea
ERMES	European Radio Message System
ERP	Effective radiated power
ES	And
EST	Estonia
ETA	Estimated time of arrival
ETA	Ethiopian Telecommunications Authority
ETH	Ethiopia
EUCAR	For flights to the Caribbean area
EUR	Europe MWARA
EUR	For flights within the European-Mediterranean region
EURAFI	For flights to Africa
EURSAM	For flights to South America
EX	Formerly
F	Fisheries
F	France
F	French
FA	French Army

FAF	French Air Force
FAPSI	Federal Agency for Government Communication and Information
FAX	Facsimile (see titles 5 and 6 on CD 1 of our COMPACT DISC RECORDING OF MODULATION TYPES)
FCST	Forecast
FDM	Frequency division multiplex teleprinter system (in general)
FE	Russian Federation (Far East E of 140° E)
FEC	Forward error correction teleprinter system (in general)
FEC-A	One-way traffic FEC teleprinter system according to UNIVERSAL and WAVECOM (see advertisements at the end of this book, chapter 18.12 in our RADIO DATA CODE MANUAL, and title 29 on CD 2 of our COMPACT DISC RECORDING OF MODULATION TYPES)
FEMA	Federal Emergency Management Agency
FF	French Forces
FIG	Figure(s)
FIN	Finland
FJI	Fiji
FL	Flight level
FL	Florida
FLD	Field
FLK	Falkland Islands (Malvinas) and Dependencies
FM	Frequency modulation
FM	From
FN	French Navy
FOXES	Test slip such as "the quick brown fox jumps over the lazy dog test de zso"
FPO	Fleet Post Office
FSK	Frequency-shift keying
FSM	Micronesia
FSP	Flatbed Scanning Process
FYI	For your information
G	German
G	United Kingdom
GA	Georgia
GA	You may transmit
GAB	Gabon
GAF	German Air Force
GCG	German Coast Guard
GD	Good
GDL	Guadeloupe and Dependencies
GEO	Georgia
GHA	Ghana
GIB	Gibraltar
GMB	Gambia
GMDSS	Global Maritime Distress and Safety System
GMT	Greenwich Mean Time
GN	German or Greek Navy
GNA	Gulf News Agency
GNB	Guinea-Bissau
GNE	Equatorial Guinea
GP	Group
GPO	General Post Office
GRC	Greece
GRD	Grenada
GRL	Greenland
GRT	Gross register tonnage
GTM	Guatemala
G-TOR	GOLAY Transmission Over Radio data burst teleprinter system according to WAVECOM (see advertisement at the end of this book and chapter 18.13 in our RADIO DATA CODE MANUAL)
GTS	Global Telecommunication System

GUF	Guiana (French)
GUI	Guinea
GUM	Guam
GUY	Guyana
HARCO	Harris Corp
HC-ARQ	HAEGELIN-CRYPTOS simplex teleprinter system according to WAVECOM (see advertisement at the end of this book, chapter 18.14 in our RADIO DATA CODE MANUAL, and title 29 on CD 1 of our COMPACT DISC RECORDING OF MODULATION TYPES)
HDG	Heading
HF	High frequency
HI	Laughter
HINA	Croatian International News Agency
HKG	Hong Kong
HKTI	Hong Kong Telecom International Ltd
HND	Honduras
HNG	Hungary
HNG-FEC	Hungarian diplomatic FEC teleprinter system according to WAVECOM (see advertisement at the end of this book, chapter 18.15 in our RADIO DATA CODE MANUAL, and title 30 on CD 2 of our COMPACT DISC RECORDING OF MODULATION TYPES)
HPA	Hectopascal
HQ	Headquarters
HR	Hour
HRS	Hours
HRV	Croatia
HTI	Haiti
HW	How
HWA	Hawaii
HX	Harmonic emission of
I	Italian
I	Italy
IA	Iowa
IA	Italian Army
IAF	Irish or Italian Air Force
IAG	Institute of Applied Geophysics
IAT	International Atomic Time
ICAO	International Civil Aviation Organization
ICO	Cocos (Keeling) Islands
ICRC	International Committee of the Red Cross
ID	Idaho
ID	Identification
IFG	Italian Finance Guard
IFL	International Frequency List
IFOR	Implementation Force
IFRB	International Frequency Registration Board
IL	Illinois
IMI	Interrogation sign (..--.. *to be sent as one signal)*
IMO	International Maritime Organization
IN	Indian or Indonesian or Irish or Israel or Italian Navy
IN	Indiana
INA	Iraqi News Agency
IND	India
INF	Information
INM	Instituto Nacional de Meteorologia
INO	Indian Ocean MWARA
INS	Indonesia
INT	Interrogation sign
INTEL	Instituto Nacional de Telecomunicaciones
INTERPOL	Organisation Internationale de la Police Criminelle

IOC	Index of cooperation
IR	Infrared
IRA	International Reference Alphabet - information technology 7-bit coded character set for information interchange (sometimes incorrectly named "ASCII") (see title 35 on CD 1 of our COMPACT DISC RECORDING OF MODULATION TYPES)
IRA-ARQ	International Reference Alphabet diplomatic data burst teleprinter system
IRL	Ireland
IRN	Iran
IRPT	I repeat
IRQ	Iraq
ISB	Independent sidebands audible within a 4 kHz bandwidth (see title 8 on CD 1 of our COMPACT DISC RECORDING OF MODULATION TYPES)
ISD	Inverted scanning direction
ISL	Iceland
ISR	Israel
ITA	International Telegraph Alphabet (for ITA2 see titles 30, 31, 32, 33 and 34 on CD 1 and title 17 on CD 2 of our COMPACT DISC RECORDING OF MODULATION TYPES)
ITP	The punctuation counts
ITU	International Telecommunication Union
J	Japan
JANA	Jamahiriyah News Agency
JMC	Jamaica
JN	Japanese Navy
JON	Johnston Island
JOR	Jordan
K	Invitation to transmit
KA	Starting signal (-.-.- *to be sent as one signal)*
KAZ	Kazakhstan
KC	Kilocycles
KCNA	Korean Central News Agency
KEN	Kenya
KER	Kerguelen Islands
KGZ	Kyrgyzstan
KHZ	Kilohertz
KIR	Kiribati
KMH	Kilometers per hour
KOR	Korea (Republic of)
KPL	Khaosan Pathet Lao
KRE	Korea (Undemocratic People's Republic of)
KTS	Nautical miles per hour (*knots*)
KWT	Kuwait
KY	Kentucky
KYODO	Kyodo Tsushin
LA	Louisiana
LAB	Labrador
LAN	Linea Aerea Nacional
LAO	Laos
LBN	Lebanon
LBR	Liberia
LBY	Libya
LCA	Saint Lucia
LF	Low frequency
LFM	Limited-area fine mesh
LIE	Liechtenstein
LL	Landline
LORAN	Long Range Navigation System
LR	The last message received by me was ...
LS	The last message sent by me was ...

LSB	Lower sideband (see titles 9, 10, 11 and 12 on CD 1 of our COMPACT DISC RECORDING OF MODULATION TYPES)
LSO	Lesotho
LTR	Letter(s)
LTU	Lithuania
LUX	Luxembourg
LVA	Latvia
LW	Longwave
MA	Malaysian Army
MA	Massachussetts
MAC	Macau
MAFOR	Forecast for shipping
MAN	Manitoba
MAP	Maghreb Arabe Presse
MAR	Maritime
MARS	Military Affiliated Radio System
MAU	Mauritius
MB	Millibar
MC	Megacycles
MC	Multiple copy
MCG	Mauritius Coast Guard
MCO	Monaco
MCVFT	Multi-channel voice-frequency telegraphy system (for example J7B) (see chapter 16 in our RADIO DATA CODE MANUAL, and title 17 on CD 2 of our COMPACT DISC RECORDING OF MODULATION TYPES)
MD	Maryland
MDA	Moldavia
MDG	Madagascar
MDR	Madeira
MDW	Midway Islands
ME	Maine
METAR	Aviation routine weather report (see chapter 3.7 in our RADIO DATA CODE MANUAL)
METEO	Fixed station used for the transmission of meteorological information
MEX	Mexico
MF	Medium frequency
MFA	Ministry of Foreign Affairs
MHL	Marshall Islands
MHZ	Megahertz
MI	Michigan
MID	For flights to the Middle and Far East
MID	Middle East MWARA
MIL	Military
MILF	Moro Islamic Liberation Front
MILIPI	Ministry of the Line and Phoenix Islands
MIN	Minute (*or* Minutes)
MIS	Missing
MK	Mark
MKD	Macedonia
MLA	Malaysia
MLD	Maldives
MLD	Mixed layer depth
MLI	Mali
MLT	Malta
MMM	Frequency assignment for inter-ship communications
MMS	Maritime Mobile Service
MN	Malaysian Navy
MN	Minnesota
MNG	Mongolia
MO	Missouri

MOD	Ministry of Defense
MOD	Modulation
MOH	Ministry of Health
MOI	Ministry of Interior
MOSSAD	Hamossad Hamerkazi Lemodi'in Vetakidim Meyuchadim - Central Institute for Intelligence and Special Assignments
MOZ	Mozambique
MRA	Marianas (Northern)
MRC	Morocco
MRN	Marion Island
MRS	Mountain Radio Service
MRT	Martinique
MS	Mississippi
MSA	Maritime Safety Agency
MSF	Medecins sans frontieres
MSG	Message
MSI	Maritime Safety Information (see chapter 18.28 in our RADIO DATA CODE MANUAL)
MSL	Mean sea level
MSR	Misrouted
MSR	Montserrat
MSV	Manned Space Vehicle
MT	Montana
MTI	Magyar Tavirati Iroda
MTN	Mauritania
MTOW	Maximum take-off weight
MUX	Multiplex
MW	Medium wave
MWARA	Major World Air Route Area (see map 1)
MWI	Malawi
MWM	Worldwide
MX	Music
MYA	Myanmar
MYT	Mayotte Island
N	North
N	Norwegian
NA	Norwegian Army
NAT	For flights to North America
NAT	North Atlantic MWARA
NATO	North Atlantic Treaty Organization
NAVTEX	Navigational and meteorological warnings and urgent information for ships (see chapter 18.28 in our RADIO DATA CODE MANUAL)
NB	New Brunswick
NBDPT	Narrow-Band Direct-Printing Telegraphy
NBFM	Narrow-band frequency modulation
NC	North Carolina
NCA	North Central Asia MWARA
NCG	Netherlands Coast Guard
NCG	Nicaragua
NCL	New Caledonia and Dependencies
ND	Non-directional
ND	North Dakota
NE	Nebraska
NFK	Norfolk Island
NFLD	Newfoundland
NGR	Niger
NH	New Hampshire
NI	Norfolk Island
NIG	Nigeria
NIL	I have nothing to send to you

NIU	Niue Island
NJ	New Jersey
NLD	Netherlands
NLMOC	Naval Atlantic Meteorology and Oceanography Center
NM	New Mexico
NMB	Namibia
NMC	National Meteorological Center
NN	Norwegian Navy
NOAA	National Oceanic and Atmospheric Administration
NOGAPS	Navy Operational Global Atmospherics Prediction System
NOR	Norway
NORAPS	Navy Operational Regional Atmospherics Prediction System
NOTAM	Notice containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard (see chapter 14 in our RADIO DATA CODE MANUAL)
NP	North Pacific MWARA
NPL	Nepal
NR	Near
NR	Number
NRU	Nauru
NS	Nova Scotia
NSW	New South Wales
NT	Northern Territory
NTA	National Telecommunication Administration
NTM	New Tribes Mission
NV	Nevada
NW	Now
NWS	National Weather Service
NWT	North West Territories
NX	News (*or* notices)
NY	New York
NZCD	New Zealand Civil Defence
NZCG	New Zealand Coast Guard
NZL	New Zealand
OBS	Observations
OCE	Polynesia (French)
OH	Ohio
OK	Oklahoma
OK	We agree (*or* It is correct)
OL	Ocean letter
OM	Old man
OMA	Oman
ONT	Ontario
ONU	United Nations
OP	Operator
OR	Oregon
(OR)	Communications, including those relating to flight coordination, concerning flights primarily outside national or international civil air routes
P	Portuguese
P	Prefix indicating a private radiotelegram
PA	Pakistan Army
PA	Pennsylvania
PA	Polynesian Airline
PACTOR	Teleprinter system combining certain characteristics of Packet Radio and SITOR (see chapter 18.30 in our RADIO DATA CODE MANUAL, and titles 3 and 4 on CD 2 of our COMPACT DISC RECORDING OF MODULATION TYPES)
PAF	Portuguese Air Force
PAK	Pakistan
PANA	Pan African News Agency
PAP	Polska Agencja Prasowa

PAQ	Easter Island
PBL	Preamble
PC	Personal computer
PEI	Prince Edward Island
PEM	Primitive equation model
PEP	Peak envelope power
PERTAMINA	Indonesian National Petroleum Company
PETRA	Jordan News Agency
PETRONAS	Malaysian National Petroleum Exploration Co Sendirian Berhad
PHL	Philippines
PHX	Phoenix Islands
PIAB	Propaganda- und Intrigen-Anstalt dieser eurer Bankrottregierung
PICCOLO	6- or 12-tone multi-frequency-shift keying teleprinter system according to UNIVERSAL and WAVECOM (see advertisements at the end of this book, chapter 18.31 in our RADIO DATA CODE MANUAL, and titles 5 and 6 on CD 2 of our COMPACT DISC RECORDING OF MODULATION TYPES)
PILOT	Upper-wind report (see chapter 3.8 in our RADIO DATA CODE MANUAL)
PIX	Press photograph
PLM	Palmyra Island
PLO	Palestine Liberation Organization
PLS	Please
PLW	Palau
PM	Pulse modulation
PN	Pakistan or Paraguayan or Peruvian or Portuguese Navy
PNA	Philippines News Agency
PNG	Papua New Guinea
PNGDF	Papua New Guinea Defence Force
PNR	Panama
POL	Poland
POL-ARQ	Polish diplomatic ARQ teleprinter system according to WAVECOM (see advertisement at the end of this book, chapter 18.32 in our RADIO DATA CODE MANUAL, and title 27 on CD 2 of our COMPACT DISC RECORDING OF MODULATION TYPES)
POR	Portugal
POS	Position
PRG	Paraguay
PROG	Prognosis
PRU	Peru
PSE	Please
PSF	Pharmaciens sans frontieres
PSK	Phase-shift keying
PT	Part
PTC	Pitcairn Island
PTP	Point-to-point
PTR	Puerto Rico
PTT	Post, Telegraph and Telephone Administration
PWD	Public Works Department
QAT	Qatar
QLD	Queensland
QPSK	Quaternary phase-shift keying
QUE	Quebec
R	Radio (coastal station)
R	Received
R	Russian (see chapter 18.19 in our RADIO DATA CODE MANUAL)
(R)	Communications relating to safety and regularity of flight, primarily along national or international civil air routes.
RA	Radiocommunication Assembly
RAA	Royal Australian Army
RAAF	Royal Australian Air Force

RAC-ARQ	Racal teleprinter system (see chapter 18.33 in our RADIO DATA CODE MANUAL)
RAF	Royal Air Force
RAFC	Regional Area Forecast Centre
RAN	Royal Australian Navy
RCC	Rescue Coordination Centre
RDARA	Regional and Domestic Air Route Area (see map 2)
RE	Concerning
REF	Reference to ... (*or* Refer to ...)
REG1	Region 1
REG2	Region 2
REG3	Region 3
REU	Reunion and Dependencies
REUTER	Reuters Ltd
RF	Radio frequency
RFDS	Royal Flying Doctor Service
RI	Rhode Island
RJ	Royal Jordanian
RMC	Regional Meteorological Centre
RN	Royal Navy
RNZAF	Royal New Zealand Air Force
RNZN	Royal New Zealand Navy
ROD	Rodrigues
ROFOR	Aviation forecast in figure code prepared for a route between two specified aerodromes (see chapter 3.8 in our RADIO DATA CODE MANUAL)
ROMPRES	Agentia Romana de Presa
ROU	Romania
RPFR	Reperforator
RPM	Rotations per minute
RPT	Repeat (*or* I repeat) (*or* Repeat ...)
RQ	Indication of a request
RR	Radio Regulation
RRB	Radio Regulations Board
RRC	Regional Radiocommunication Conference
RRL	Radio Research Laboratories
RRW	Rwanda
RTTY	Radioteletype
RUM-FEC	Romanian diplomatic FEC teleprinter system according to WAVECOM (see advertisement at the end of this book, chapter 18.34 in our RADIO DATA CODE MANUAL, and title 31 on CD 2 of our COMPACT DISC RECORDING OF MODULATION TYPES)
RUS	Russian Federation (areas east of 60° E are additionally specified by FE, SE and SW)
RX	Receiver
RY	Test slip such as "ryryryryryryryryryryry deutsche welle relais trincomalee sri lanka"
RYI	Test slip such as "de mgj testing ryiryiryiryiryiryiryiryiryiryiryiryiryiryiryiryiryiryi"
S	South
S	Spanish
S	Sweden
SA	South Australia
SA	Spanish or Swiss Army
SAF	Spanish Air Force
SAM	South America MWARA
SAN	South African Navy
SANA	Syrian Arab News Agency
SAR	Search and Rescue
SASK	Saskatchewan
SAT	Serbian Aerotransport
SAT	South Atlantic MWARA
SAUDIA	Saudi Arabian Airlines

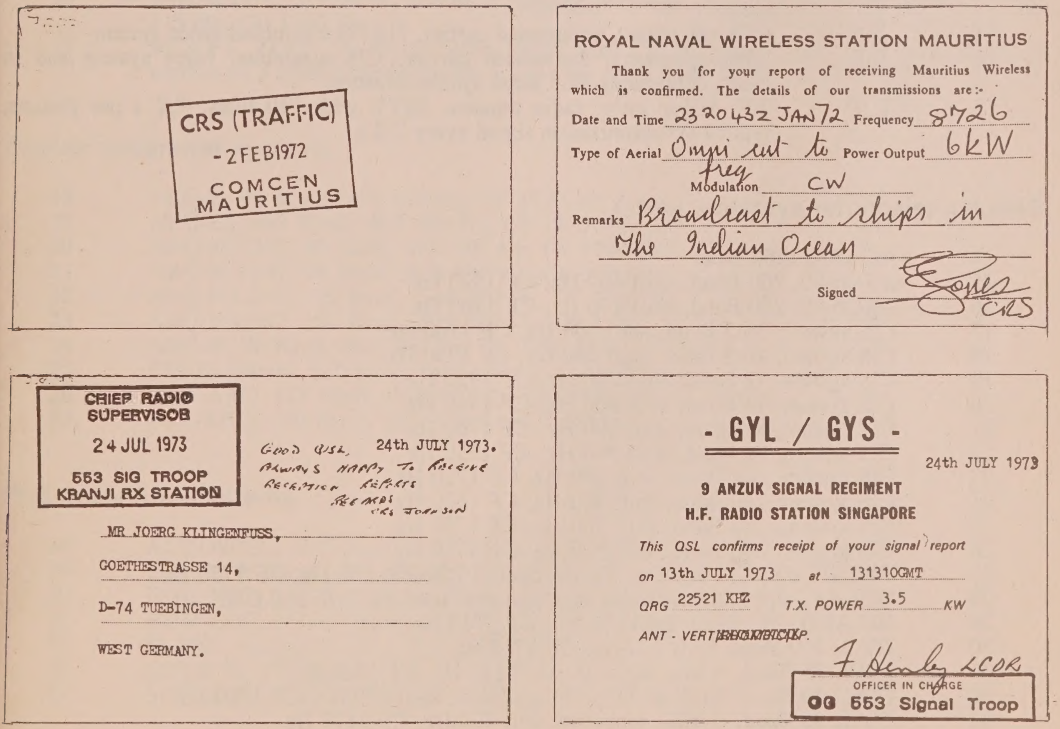
SC	South Carolina
SCN	Saint Kitts and Nevis
SD	South Dakota
SDN	Sudan
SE	Russian Federation (Eastern Siberia 100° E - 140° E)
SEA	South East Asia MWARA
SEN	Senegal
SEY	Seychelles
SFC	Surface
SGD	Singapore Dollar
SHF	Super high frequency
SHIP	Report of surface observation from a sea station (see chapter 3.10 in our RADIO DATA CODE MANUAL)
SHN	Saint Helena
SI-ARQ	SIEMENS simplex ARQ teleprinter system according to UNIVERSAL and WAVECOM (see advertisement at the end of this book, chapter 18.35 in our RADIO DATA CODE MANUAL, and title 11 on CD 2 of our COMPACT DISC RECORDING OF MODULATION TYPES)
SI-FEC	SIEMENS simplex FEC teleprinter system according to UNIVERSAL and WAVECOM (see advertisement at the end of this book, chapter 18.35 in our RADIO DATA CODE MANUAL, and title 32 on CD 2 of our COMPACT DISC RECORDING OF MODULATION TYPES)
SIG	Signature
SIGWX	Significant weather
SISMI	Servizio per le Informazioni e la Sicurezza Militare
SITOR	Simplex teleprinting over radio system according to CCIR 476-4 (see chapter 18.36 in our RADIO DATA CODE MANUAL)
SITOR-A	Simplex teleprinting over radio system according to CCIR 476-4, mode A (ARQ) (see chapter 18.36 in our RADIO DATA CODE MANUAL, and titles 12, 13 and 14 on CD 2 of our COMPACT DISC RECORDING OF MODULATION TYPES)
SITOR-B	Simplex teleprinting over radio system according to CCIR 476-4, mode B (FEC) (see chapter 18.36 in our RADIO DATA CODE MANUAL, and title 33 on CD 2 of our COMPACT DISC RECORDING OF MODULATION TYPES)
SKH	Schweizerische Katastrophen-Hilfe
SLK	Sri Lanka
SLM	Solomon Islands
SLRA	Sierra Leone Roads Authority
SLT	Radiomaritime letter
SLV	El Salvador
SMA	Samoa (American)
SMO	Samoa (Western)
SMR	San Marino
SN	Spanish or Swedish Navy
SNG	Singapore
SOM	Somalia
SOS	Distress signal (...---... *to be sent as one signal)*
SOUD	Soglaschenije o sisteme objedinennowo utschotja dannych o protiwnike - Integrated System of the Socialist States for the Registration of Information about the Enemy
SP	South Pacific MWARA
SP	Space
SP	Spurious emission of
SPA	Sarawak Port Authority
SPECI	Aviation selected special weather report (see chapter 3.7 in our RADIO DATA CODE MANUAL)
SPM	Saint-Pierre and Miquelon
SPREAD	FEC teleprinter system with 10-bit Bauer code according to WAVECOM (see advertisement at the end of this book, chapter 18.37 in our RADIO DATA CODE MANUAL, and title 34 on CD 2 of our COMPACT DISC RECORDING OF MODULATION TYPES)
SRB	Serbia

SRI	Sorry
SRL	Sierra Leone
SS	Indicator preceding the name of a ship station
SSB	Single sideband (see titles 9, 10, 11 and 12 on CD 1 of our COMPACT DISC RECORDING OF MODULATION TYPES)
ST	Singapore Telecom
STP	Sao Tome and Principe
SUI	Switzerland
SUNA	Sudan News Agency
SUR	Surinam
SVC	Prefix indicating a service telegram
SVK	Slovakia
SVN	Slovenia
SW	Russian Federation (Western Siberia 60° E - 100° E)
SW	Shortwave
SWED-ARQ	Adaptive Swedish diplomatic simplex ARQ teleprinter system according to UNIVERSAL and WAVECOM (see advertisements at the end of this book, chapter 18.38 in our RADIO DATA CODE MANUAL, and title 15 on CD 2 of our COMPACT DISC RECORDING OF MODULATION TYPES)
SWL	Shortwave listener
SWN	Swan Islands
SWZ	Swaziland
SYNOP	Report of surface observation from a land station (see chapter 3.10 in our RADIO DATA CODE MANUAL)
SYR	Syria
SYS	Refer to your service telegram
TAF	Aerodrome forecast (see chapter 3.11 in our RADIO DATA CODE MANUAL)
TAI	Taiwan
TANJUG	Telegrafska Agencija Nova Jugoslavija
TAS	Tasmania
TBL	Trouble
TCA	Turks and Caicos Islands
TCD	Chad
TDM	Time division multiplex teleprinter system (in general)
TELSTRA	Telecom Australia
TEMP	Upper-level pressure, temperature, humidity and wind report (see chapter 3.12 in our RADIO DATA CODE MANUAL)
TESAC	Report of observations of temperature, salinity and current from a sea station (see chapter 3.13 in our RADIO DATA CODE MANUAL)
TFC	Traffic
TGO	Togo
THA	Thailand
TJK	Tajikistan
TKL	Tokelau Islands
TKM	Turkmenistan
TMW	Tomorrow
TN	Tennessee
TN	Tunisian or Turkish Navy
TON	Tonga
T-PLEX	Eight-frequency adaptive duplex ARQ teleprinter system
TR	Used by a land station to request the position and next port of call of a mobile station; used also as a prefix to the reply
TRACKOB	Report of consecutive marine surface observations along a ship's track (see chapter 3.14 in our RADIO DATA CODE MANUAL)
TRC	Tristan da Cunha
TRD	Trinidad and Tobago
TS	Time Signals and/or Standard Frequency Station
TTS	Telex and/or traffic to ships
TTT	This group when sent three times constitutes the safety signal
TTY	Teletype

TU	Thank you
TUN	Tunisia
TUR	Turkey
TUV	Tuvalu
TV	Television
TWINPLEX	Four-frequency diplex teleprinter system according to WAVECOM (see advertiseent at the end of this book, chapter 18.40 in our RADIO DATA CODE MANUAL, and titles 27 on CD 1 and 16 on CD 2 of our COMPACT DISC RECORDING OF MODULATION TYPES)
TX	Texas
TX	Transmitter
TXT	Text
TZA	Tanzania
UAE	United Arab Emirates
UAF	Uruguayan Air Force
UGA	Uganda
UHF	Ultra high frequency
UKR	Ukraine
UN	Uruguayan Navy
UNDOF	United Nations Disengagement and Observation Forces
UNECA	United Nations Economic Commission for Africa
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNF	United Nations Forces
UNFICYP	United Nations Peace Force in Cyprus
UNID	Unidentified
UNIFIL	United Nations Interim Forces in Lebanon
UNNNSC	United Nations Neutral Nations Supervisory Commission
UNO	United Nations Organization
UPR	Undemocratic People's Republic
UR	Your
URG	Uruguay
URSIGRAM	Bulletins containing solar and geophysical data (see chapter 6 in our RADIO DATA CODE MANUAL)
USA	United States Army
USA	United States of America (except Alaska and Hawaii)
USACE	United States Army Corps of Engineers
USAF	United States Air Force
USB	Upper sideband (see titles 9, 10, 11 and 12 on CD 1 of our COMPACT DISC RECORDING OF MODULATION TYPES)
USCG	United States Coast Guard
USD	United States Dollar
USE	United States Embassy
USN	United States Navy
USNG	United States National Guard
USP	University of the South Pacific
UT	Universal Time
UT	Utah
UTC	Coordinated Universal Time
UZB	Uzbekistan
V	Vietnamese
VA	End of work (...-.- *to be sent as one signal)*
VA	Virginia
VAFI	Africa VOLMET Area
VCAR	Caribbean VOLMET Area
VCT	Saint Vincent and the Grenadines
VEN	Venezuela
VEUR	Europe VOLMET Area
VFT	Voice-frequency telegraphy system (for example J7B) (see chapter 16 in our RADIO DATA CODE MANUAL, and title 17 on CD 2 of our COMPACT DISC RECORD-ING OF MODULATION TYPES)

VIC	Victoria
VIR	Virgin Islands (United States)
VIS	Visual
VLF	Very low frequency
VM	Voice mirror
VMID	Middle East VOLMET Area
VN	Venezolan Navy
VNA	Viet Nam News Agency
VNAT	North Atlantic VOLMET Area
VNCA	North Central Asia VOLMET Area
VOA	Voice of America
VOLMET	Meteorological information for aircraft in flight
VPAC	Pacific VOLMET Area
VRG	Virgin Islands (British)
VSAM	South America VOLMET Area
VSEA	South East Asia VOLMET Area
VT	Validity time
VT	Vermont
VTN	Viet Nam
VUT	Vanuatu
VVV...VVV	Marking or test transmission
VY	Very
W	West
W I	World-Wide Allotment Area I (comprises RDARAs 1, 2 and 3)
W II	World-Wide Allotment Area II (comprises RDARAs 10, 11, 12A - 12D)
W III	World-Wide Allotment Area III (comprises RDARAs 6, 8, 9 and 14)
W IV	World-Wide Allotment Area IV (comprises RDARAs 12E to 12J and 13)
W V	World-Wide Allotment Area V (comprises RDARAs 4, 5 and 7)
WA	Washington
WA	West Australia
WA	Word after ...
WAK	Wake Island
WAL	Wallis and Futuna Islands
WARC	World Administrative Radio Conference
WB	Word before ...
WCA	With Cyrillic alphabet (see title 33 on CD 1 of our COMPACT DISC RECORDING OF MODULATION TYPES)
WD	Word(s) *or* Group(s)
WEFAX	Weather facsimile
WI	Wisconsin
WINTEM	Forecast of upper wind and temperature for aviation (see chapter 3.15 in our RADIO DATA CODE MANUAL)
WLA	With Latin alphabet
WMC	World Meteorological Centre
WMO	World Meteorological Organization
WPM	Words per minute
WRC	World Radiocommunication Conference
WTG	Waiting
WTSCA	With third-shift Cyrillic alphabet (see chapter 18.23 in our RADIO DATA CODE MANUAL, and title 32 on CD 1 of our COMPACT DISC RECORDING OF MODULATION TYPES)
WV	West Virginia
WWW	World Weather Watch
WX	Weather
WY	Wyoming
XQ	Prefix used to indicate an operating communication in the fixed service
XXX	This group when sent three times constitutes the urgency signal
YEM	Yemen
YES	Yes
YONHAP	Hapdong News Agency

YR	Year
YR	Your
YT	Yukon Territory
YZ	The words which follow are in plain language
Z	Coordinated Universal Time
ZAI	Zaire
ZFDS	Zambia Flying Doctor Service
ZMB	Zambia
ZWE	Zimbabwe
$	Schedule see chapter 11
5fgs	5-figure groups
5lgs	5-letter groups
73	Best wishes
(1196)	Month and year of last reception of unidentified stations
//	In parallel to ☺



CRS (TRAFFIC)
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COMCEN
MAURITIUS

ROYAL NAVAL WIRELESS STATION MAURITIUS

Thank you for your report of receiving Mauritius Wireless which is confirmed. The details of our transmissions are:-

Date and Time 2320432 JAN72 Frequency 8726

Type of Aerial Omni cut to freq Power Output 6kW

Modulation CW

Remarks Broadcast to ships in The Indian Ocean

Signed Jones CRS

CHIEF RADIO
SUPERVISOR
24 JUL 1973
553 SIG TROOP
KRANJI RX STATION

24th JULY 1973.

Good QSL, Always happy to receive reception reports
Regards
CRS Johnson

MR JOERG KLINGENFUSS,
GOETHESTRASSE 14,
D-74 TUEBINGEN,
WEST GERMANY.

- GYL / GYS -

24th JULY 1973

9 ANZUK SIGNAL REGIMENT
H.F. RADIO STATION SINGAPORE

This QSL confirms receipt of your signal report

on 13th JULY 1973 at 131310GMT

QRG 22521 KHZ T.X. POWER 3.5 KW

ANT - VERT[illegible]P.

F. Henley LCDR
OFFICER IN CHARGE
OC 553 Signal Troop

Historic Royal Navy Mauritius and Singapore QSL cards from 1972/1973

Recordings of modulation types

For those of you who constantly mislay the list of recordings on our compact discs or cassettes, here is a summary for your convenience.

CD 1

Non-teleprinter signals

1	N0N	CW carrier, 1 kHz
2	A1A	CW telegraphy, standard Morse alphabet
3	F1A	Telegraphy, Cyrillic Morse alphabet
4	A3E	DSB; sound BC, Radio Prague
5	F1C	FAX, black-and-white, drum speed 120 rpm; mark, IOC 288 selection signal, synchronization pulses, picture elements, and stop signal
6	A1C	FAX, satellite, grey, drum speed 240 rpm; mark, IOC 288 selection signal, synchronization pulses, picture elements, and stop signal
7	H2B	Hellschreiber
8	B8E	ISB; sound BC; tuning from AM to LSB to USB to AM to USB to LSB to AM
9	J3E	SSB, telephony, suppressed carrier
10	J3E	SSB, telephony, suppressed carrier, French scrambled voice system and in clear
11	J3E	SSB, telephony, suppressed carrier, NATO scrambled voice system
12	J3E	SSB, telephony, suppressed carrier, CIS scrambled voice system and in clear, continuous 12.5 Baud synchronization
13	R3F	TV, vision only; radio amateur SSTV with 120 lines, 7.2 s per picture; typical synchronization signal every 7.2 s

Simplex teleprinter systems, part 1

14 ACARS, 1200 Baud
15 ARQ6-90, 200 Baud, shift 400 Hz, CF 1820 Hz
16 ARQ6-98, 200 Baud, shift 170 Hz, CF 1760 Hz
17 CIS system, 36.5 Baud, shift 500 Hz, CF 1700 Hz
18 CIS system, 40.5 Baud, shift 500 Hz, CF 1750 Hz
19 CIS system, 72 Baud, shift 250 Hz, CF 1720 Hz
20 CIS system, 75 Baud, shift 500 Hz, CF 1760 Hz
21 CIS system, 81 Baud, shift 200 Hz, CF 1760 Hz
22 CIS system, 96 Baud, shift 500 Hz, CF 1750 Hz
23 CIS system, 144 Baud, shift 250 Hz, CF 1720 Hz
24 CIS system, 150 Baud, shift 500 Hz, CF 1620 Hz
25 CIS system, 200 Baud, shift 500 Hz, CF 1750 Hz
26 CIS system, 300 Baud, shift 850 Hz, CF 1750 Hz
27 TWINPLEX, CIS system, 200 Baud, shift 250-250-250 Hz, CF 1750 Hz
28 GOLAY, alphanumeric radio paging system used on VHF and UHF
29 HC-ARQ, 240 Baud, shift 190 Hz, CF 1740 Hz
30 ITA2, 100 Baud, shift 400 Hz, CF 1760 Hz
31 ITA2, 75 Baud, Arabic alphabet, shift 520 Hz, CF 1800 Hz
32 ITA2, 50 Baud, third-shift Cyrillic alphabet, shift 170 Hz, CF 1760 Hz
33 ITA2, 50 Baud, Cyrillic alphabet, shift 400 Hz, CF 1810 Hz
34 ITA2, 50 Baud, bit inversion 00001, shift 200 Hz, CF 1740 Hz
35 IRA, 200 Baud, 7 data bits, shift 300 Hz, CF 1760 Hz

36 NATO Link4, 75 Baud, encrypted, with start and end phase sequences, shift 865 Hz, CF 1640 Hz
37 NATO Link11, 2400 Baud, 40 DPSK, 15 data tones, 1 doppler tone, hamming codes

CD 2

Simplex teleprinter systems, part 2

1 Packet Radio, 300 Baud, HF, shift 200 Hz, CF 1760 Hz
2 Packet Radio, 1200 Baud, UHF, shift 1000 Hz
3 PACTOR, 200 Baud, shift 200 Hz, CF 1320 Hz
4 PACTOR, special ICRC system, 200 Baud, shift 170 Hz, CF 1710 Hz
5 MFSK, Racal Piccolo Mark 6, 6 tones, 20 Baud, shift 5 × 22 Hz, CF 1900 Hz
6 MFSK, Racal Piccolo Mark 12, 12 tones, 40 Baud, shift 11 × 22 Hz, CF 1765 Hz
7 MFSK, CIS Piccolo, 33 tones, 40 Baud, shift 32 × 40 Hz, CF 2095 Hz
8 POCSAG, 1200 Baud, alphanumeric radio paging system used on VHF and UHF
9 QAM, Chinese system, bandwidth ≈ 1500 Hz, CF ≈ 11100 Hz
10 ALIS, 228.5 Baud, shift 170 Hz, CF 1760 Hz
11 SI-ARQ, 96 Baud, 6 characters, shift 170 Hz, CF 1760 Hz
12 SITOR-A, 100 Baud, shift 170 Hz, CF 1750 Hz
13 SITOR-A, 100 Baud, Cyrillic alphabet, shift 170 Hz, CF 1900 Hz
14 SITOR-A, 100 Baud, ATU-Arabic alphabet, shift 170 Hz, CF 1680 Hz
15 SWED-ARQ, 100 Baud, all block lengths, shift 400 Hz, CF 1920 Hz
16 TWINPLEX, SITOR-A, 100 Baud, aggregate combination YYBB BYBY, shift 115-170-115 Hz, CF 1760 Hz
17 MCVFT, ITA2, 50 Baud, tuning from wide (10 kHz) via 1.5, 1.0 and 0.6 kHz to narrow (0.3 kHz) filter bandwidths and vice versa, shift 340 Hz, CF 1780 Hz

Duplex teleprinter systems

18 ARQ-E, 96 Baud, shift 170 Hz, CF 1770 Hz
19 ARQ-E3, 192 Baud, shift 400 Hz, CF 1870 Hz
20 ARQ-M2-242, 96 Baud, shift 400 Hz, CF 1770 Hz
21 ARQ-M2-342, 96 Baud, shift 400 Hz, CF 1770 Hz
22 ARQ-M4-242, 192 Baud, shift 170 Hz, CF 1760 Hz
23 ARQ-M4-342, 192 Baud, shift 400 Hz, CF 1780 Hz
24 ARQ-N, 96 Baud, shift 860 Hz, CF 1980 Hz
25 CIS-11 system, 100 Baud, shift 500 Hz, CF 1780 Hz
26 DUP-ARQ, 125 Baud, shift 170 Hz, CF 1750 Hz
27 POL-ARQ, 100 Baud, shift 300 Hz, CF 1790 Hz

FEC teleprinter systems

28 AUTOSPEC, 68.5 Baud, shift 270 Hz, CF 1800 Hz
29 FEC-A, 96 Baud, shift 400 Hz, CF 1660 Hz
30 HNG-FEC, 100.05 Baud, shift 425 Hz, CF 1800 Hz
31 RUM-FEC, 164.48 Baud, shift 400 Hz, CF 1760 Hz
32 SI-FEC, 96 Baud, shift 170 Hz, CF 1790 Hz
33 SITOR-B, 100 Baud, shift 170 Hz, CF 1770 Hz
34 SPREAD51, 102.7 Baud, shift 400 Hz, CF 1760 Hz

CC

Non-teleprinter signals

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2	A1A	CW telegraphy, standard Morse alphabet
3	F1A	Telegraphy, Cyrillic Morse alphabet
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6	H2B	Hellschreiber
7	B8E	ISB; sound BC; tuning from AM to LSB to USB to AM
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12 ARQ6-98, 200 Baud, shift 170 Hz, CF 1760 Hz
13 CIS system, 36.5 Baud, shift 500 Hz, CF 1700 Hz
14 CIS system, 40.5 Baud, shift 500 Hz, CF 1750 Hz
15 CIS system, 75 Baud, shift 500 Hz, CF 1760 Hz
16 CIS system, 81 Baud, shift 200 Hz, CF 1760 Hz
17 CIS system, 96 Baud, shift 500 Hz, CF 1750 Hz
18 CIS system, 144 Baud, shift 250 Hz, CF 1720 Hz
19 CIS system, 150 Baud, shift 500 Hz, CF 1620 Hz
20 CIS system, 200 Baud, shift 500 Hz, CF 1750 Hz
21 Clover, four-pulse BPSM, 125 Baud
22 TWINPLEX, CIS system, 200 Baud, shift 250-250-250 Hz, CF 1750 Hz
23 HC-ARQ, 240 Baud, shift 190 Hz, CF 1740 Hz
24 ITA2, 100 Baud, shift 400 Hz, CF 1760 Hz
25 ITA2, 75 Baud, Arabic alphabet, shift 520 Hz, CF 1800 Hz
26 ITA2, 50 Baud, third-shift Cyrillic alphabet, shift 170 Hz, CF 1760 Hz
27 IRA, 200 Baud, 7 data bits, shift 300 Hz, CF 1760 Hz
28 NATO Link4, 75 Baud, encrypted, with start and end phase sequences, shift 865 Hz, CF 1640 Hz
29 NATO Link11, 2400 Baud, 40 DPSK, 15 data tones, 1 doppler tone, hamming codes
30 Packet Radio, 300 Baud, HF, shift 200 Hz, CF 1760 Hz
31 PACTOR, 200 Baud, shift 200 Hz, CF 1320 Hz
32 MFSK, Racal AIRCALL datalink, 7 tones
33 MFSK, Racal Piccolo Mark 6, 6 tones, 20 Baud, shift 5 × 22 Hz, CF 1900 Hz
34 MFSK, Racal Piccolo Mark 12, 12 tones, 40 Baud, shift 11 × 22 Hz, CF 1765 Hz
35 MFSK, CIS Piccolo, 33 tones, 40 Baud, shift 32 × 40 Hz, CF 2095 Hz
36 MFSK, NATO MIL188, 8 tones
37 QAM, Chinese system, bandwidth ≈ 1500 Hz, CF ≈ 11100 Hz
38 RAC-ARQ, system 1, 153 Baud
39 ALIS, 228.5 Baud, shift 170 Hz, CF 1760 Hz
40 SI-ARQ, 96 Baud, 6 characters, shift 170 Hz, CF 1760 Hz
41 SITOR-A, 100 Baud, shift 170 Hz, CF 1750 Hz
42 SITOR-A, 100 Baud, Cyrillic alphabet, shift 170 Hz, CF 1900 Hz
43 SITOR-A, 100 Baud, ATU-Arabic alphabet, shift 170 Hz, CF 1680 Hz
44 SWED-ARQ, 100 Baud, all block lengths, shift 400 Hz, CF 1920 Hz
45 TWINPLEX, SITOR-A, 100 Baud, aggregate combination YYBB BYBY, shift 115-170-115 Hz, CF 1760 Hz

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48 ARQ-E3, 192 Baud, shift 400 Hz, CF 1870 Hz
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50 ARQ-M2-342, 96 Baud, shift 400 Hz, CF 1770 Hz
51 ARQ-M4-242, 192 Baud, shift 170 Hz, CF 1760 Hz
52 ARQ-M4-342, 192 Baud, shift 400 Hz, CF 1780 Hz
53 ARQ-N, 96 Baud, shift 860 Hz, CF 1980 Hz
54 CIS-11 system, 100 Baud, shift 500 Hz, CF 1780 Hz
55 DUP-ARQ, 125 Baud, shift 170 Hz, CF 1750 Hz
56 POL-ARQ, 100 Baud, shift 300 Hz, CF 1790 Hz

FEC teleprinter systems

57 AUTOSPEC, 68.5 Baud, shift 270 Hz, CF 1800 Hz
58 FEC-A, 96 Baud, shift 400 Hz, CF 1660 Hz
59 HNG-FEC, 100.05 Baud, shift 425 Hz, CF 1800 Hz
60 RUM-FEC, 164.48 Baud, shift 400 Hz, CF 1760 Hz
61 SI-FEC, 96 Baud, shift 170 Hz, CF 1790 Hz
62 SITOR-B, 100 Baud, shift 170 Hz, CF 1770 Hz
63 SPREAD51, 102.7 Baud, shift 400 Hz, CF 1760 Hz ☺

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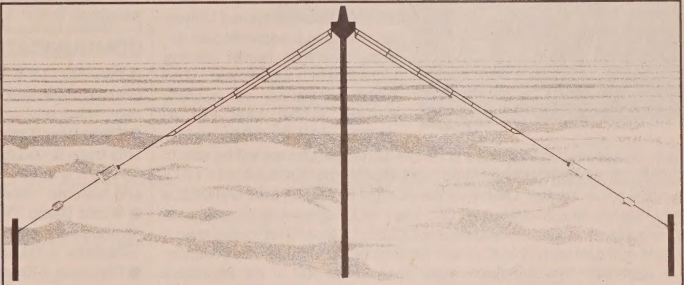
THE ALPHA DELTA DX-ULTRA DIPOLE ANTENNA

The Alpha Delta DX-Ultra is a heavy-duty dipole antenna that covers the entire spectrum from 500 kHz to 30 MHz at a reasonable price. It is the ideal broadband antenna for general coverage receivers and transceivers, providing incredible signal strength and low noise as compared to other conventional antennas. The design is based on the excellent DX-SWL sloper antenna (see pages 594-595), making it the ultimate monitoring antenna whether listening to high-power broadcasting services or distant low-power utility radio stations.

The overall length of the DX-Ultra antenna is only 25 m, with dipole, inverted V, or full sloper configurations possible. Both a standard SO239 coax socket and connectors for a balanced line are provided at the centre insulator. Needless to say, the workmanship is of the same high standard as the DX-SWL sloper antenna, for long outdoor life.



Model DX-ULTRA Dipole Antenna

To ensure protection of sensitive receiver or transceiver front end circuitry, the DX-Ultra antenna contains a replaceable static electricity protector (SEP) cartridge which discharges potentially destructive static charges from wind, rain, thunderstorm, snow and similar natural phenomena that can reach levels of thousands of volts.

With a tuner, the DX-Ultra can be used as a transmit antenna for up to 2,000 watts power.

The Alpha Delta DX-Ultra dipole antenna costs 340 DEM (Germany 300 DEM). The price includes packing and postage. We accept payment by American Express, Eurocard, Mastercard and Visa credit cards (please don't forget the expiry date!). Other modes of payment are cash in your notes, cheques, International Money Orders, or postgiro [account Stuttgart 2093 75-709]. Please order from ☺

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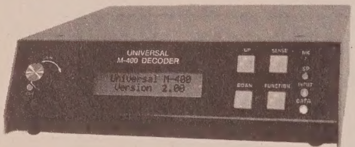
SOPHISTICATED MONITORING EQUIPMENT FROM UNIVERSAL

■ Universal M-8000 Decoder

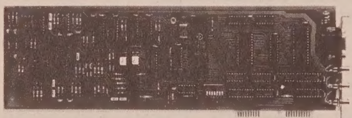
The professional-grade M-8000v7 was designed primarily for the military, commercial and diplomatic user, but can be used by the hobbyist who requires maximum intercept capability. The color VGA output includes a spectral display and simulated tuning scope plus five tuning bars. Modes currently include: **CW, Baudot, SITOR A & B, ARQ-M2 & M4, ARQ-E & E3, ARQ6-90, ARQ-S, SWED-ARQ, FEC-A, FEC-S, POL-ARQ, ASCII, Packet, Pactor, Piccolo, VFT, ACARS, GMDSS, POCSAG** and **GOLAY**. Plus display modes for: Russian Cyrillic, Literal and Databit analysis mode. Breathtaking **FAX** images to VGA monitor or printer. 115/230 AC 50/60 Hz. Contact Universal for full specifications on this military grade device. Monitor optional. *#0087* **$1399.00** (+shipping)

■ Universal M-400 Reader



Forget the limitations you have come to expect from most "readers". The self-contained Universal M-400 is a sophisticated decoder *and* tone reader offering exceptional capabilities. The shortwave listener can decode: **Baudot, SITOR A&B, FEC-A, ASCII** and **SWED-ARQ**. Weather FAX can also be decoded to the printer port. The VHF-UHF listener will be able to copy the **ACARS** VHF aviation teletype mode plus **GOLAY,** and **POCSAG** (512/1200/2400 baud) digital pager modes. Off-the-air decoding of **DTMF, CTCSS** and **DCS** is also supported. Big two-line, 20 character LCD. The M-400 can even be programmed to pass only the audio you want to hear based on CTCSS, DCS or DTMF codes of your choosing. The M-400 runs from 12 VDC or with the supplied AC adapter. No computer or monitor is required. The American-made Universal M-400 is *the* affordable accessory for every shortwave or scanner enthusiast. *#0400* **$399.95** (+shipping)

■ Universal M-1200 Decoder Card



Turn your IBM computer (or compatible) into a powerful intercept device! The Universal M-1200 Decoder Card requires just one full-size slot in your PC. Reception modes include: **Morse, Baudot RTTY, SITOR A/B, FEC-A, ARQ-M2, ARQ-E** and **ARQ-E3** plus **ASCII and Packet**. VHF enthusiasts can copy **ACARS** aviation mode, **POCSAG** and **GOLAY.** Advanced RTTY DXer's will appreciate the *Databit* and *Literal* modes, helpful in protocol identification and decryption. The video quality of your FAX intercepts will amaze you. Advanced FAX imaging includes false-color and zoom features. FAX images as well as text traffic can be saved to disk. Operation is easy through on-screen menus, status indicators and help windows. A *datascope* feature operates in both RTTY and FAX modes. The M-1200 comes with an informative manual and software on a 3½" 720K disk. Requires *PC* computer with VGA monitor. *#1200* **$399.95** (+shipping)

■ Universal ACT-1 ACARS Decoder

Combine your scanner and *PC* with the Universal ACT-1 to monitor **ACARS,** the commercial aviation teletype mode. Easy hookup to your serial port. With a free copy of *Understanding ACARS*. *#0032* **$99.95** (+shipping)

All Universal products carry a one year limited warranty. Prices and specs. are subject to change on all models.

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● **Shortwave Receivers Past & Present** *By F. Osterman*
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All shortwave broadcast stations organized by country with schedules, addresses, power, etc. *#2000* **$24.95** (+$2)

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● **Guide to FAX Radio Stations** *By J. Klingenfuss*
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- ☐ acts as a central contact point for position reporting and knows where you are
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- ☐ can pass messages to or from those at home (or office) at no cost
- ☐ has a radiophone service at very modest cost when you need to have direct contact
- ☐ provides emergency medical advise from The Royal Flying Doctor Service

Penta Comstat has been providing a very successful personalised service to mariners for more than 20 years and to land travellers for 4 years. Operating on frequencies from 2 - 22 MHz Penta Comstat has gained national and international recognition for the efficient service provided for recreational vehicles in the 'Red Centre' and pleasure craft around Australia and the Pacific. Local VHF and 27 MHz marine services are also provided in the Sydney - Gosford area.

VZX Radio Frequency Plan

Marine Distress: HF 2182, 4125, 6215, 8291, 12290, 1642, 27880 (Ch88), VHF Ch 16

Marine Calling & Safety: HF 2524, 4354, 4483, 8713, 27860 (Ch86), VHF Ch 78 & 81

Working & Radiophone: HF Ch429, Ch608, Ch836, Ch1234, Ch1642, Ch2243 & VHF Ch78

VKS737 4WD Network: HF 5455, 8022, 11612, 14977

Selcall & GPS Reporting (Compatible with BARRETT - CODAN - Q-MAC Transceivers)

Beacon Number for older radios: 0099. Operator & Beacon Number for newer radios: 0090

Daily Operating Hours for the Station are 0700 - 2200 Hrs Sydney Time with Selcall operative 24 Hrs for emergencies.

Telstra Marine Coast Station MF/HF Radio Services

Philip Collins & Associates Pty Ltd can supply Barrett Codan Q-Mac radios for these services

- ☐ Before setting off on any journey, check with Telstra for updates to this information
- ☐ View the Map of RFDS Outpost and Marine station locations
- ☐ Times shown are daily local times

'Telstra Marine Radio' - Coast Station HF Voice Services

Marine Radio Service	ITU Radio Chan.	Radio Frequencies Ship Tx kHz	Shore Tx kHz	Perth Radio VIP	Darwin Radio VID	Townsville Radio VIT	Sydney Radio VIS	Melbourne Radio VIM
Distress, Calling & Safety		2182 4125 6215	2182 4125 6215	24 Hours 24 Hours 24 Hours	24 Hours 24 Hours 24 Hours	24 Hours 24 Hours 24 Hours	24 Hours 24 Hours 24 Hours	24 Hours 24 Hours 24 Hours
Distress & Safety Only		8291 12290 16420	8291 12290 16420	24 Hours 0700-1900 0700-1900	24 Hours 0700-1900 0700-1900	24 Hours 0700-1900 0700-1900	24 Hours 0700-1900 0700-1900	24 Hours 0700-1900 0700-1900
Voice Broadcasts Weather and Working	424 608	2201 4134 6206 8176 12365	2201 4426 6507 8176 12365	0718 0918 1918 2318	0803 1133 1803 2133	0633 1033 1633 2233	0533 1103 1733 2103	0733 1133 1303 1933 2333

'Telstra Radphone' HF Radiotelephone Services

Telstra Mobile Satellite & Radio Services' Australia wide network of HF radio stations allows suitably equipped ships, aircraft and land mobiles to make and receive telephone calls over great distances. Several methods of establishing calls are available:

- ☐ **Voice Calling** - Certain Radphone channels are monitored 24 hours a day or during the local times shown in the schedule below. An operator will respond to your voice call to 'Telstra Radphone'.
- ☐ **24 Hour Tone Calling** - Radios manufactured in Australia for use in the Royal Flying Doctor Service are all equipped with an 'Emergency Call' button which, when pressed, transmits two simultaneous tones. This button may be used to raise the operator on Telstra Radphone Channels shown to have 24 Hr Tone Call. It is possible that more than one operator may respond to your call on the secondary shared channels, in which case, answer the strongest and clearest signal.
- ☐ **24 Hour Selcall** - Digital Selective Calling (Selcall) is the most modern calling method and is available on all current production Australian made HF transceivers. Unfortunately, there are several different Selcall standards and what is used by Australian stations may not necessarily work in other parts of the world. The advantage of Selcall is that you can make a 'Beacon Call' to the station first, before worrying the operator, to establish if you are in range and have selected a useable channel. This you can judge by listening for the clarity of tone signals transmitted back to you in reply to your 'Beacon call'.
- ☐ **Radphone Direct Dial (RDD)** - As an extension of the Selcall system, Telstra offers a paid period subscription service where you can cause your radio, if suitably equipped, to transmit both the Selcall number of the Telstra station and the Australian phone number that you want. The call will be automatically dialed without operator supervision and allowed to continue for 6 minutes at no cost, after which it is terminated. RDD stations are listed on a separate schedule issued to subscribers by Telstra.

Philip Collins & Associates Pty Ltd can supply Barrett Codan Q-Mac radios for these services

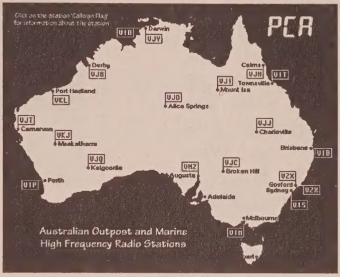
- ☐ Before setting off on any journey, check with Telstra for updates to this information

Australian Outpost & Marine HF Radio Services

This information and map is available printed on a B4 size card to carry with your radio. Ask at Royal Flying Doctor or Spectrum Management Agency offices for Philip Collins & Associates' Outpost Radio Services 'Yellow Card', or contact Marc Robinson at PCA and ask for the card and information on suitable HF radios for the services.

Email: pca@enternet.com.au Phone +61 2 9416 8799 Fax +61 2 9416 8761 or view PCA's Home Page

HF radio stations, operated by several different organisations, provide a mantle of safety for travellers and residents in Australia's remote outback areas and for sailors navigating the surrounding oceans. Each station offers different facilities and hours of operation. You should always confirm available services with the stations you may wish to communicate with, before setting off into the bush or putting to sea.



- ☐ **The Royal Flying Doctor Service** is the oldest and largest provider of outpost 'Flying Doctor Radio' communications, primarily in support of RFDS medical services which operate throughout the all states. Assistance will also be given for other emergencies, vehicle break downs, police matters, etc. Private Radphone calls can be handled by some stations, at the station operator's convenience during office hours, provided that prior arrangements have been made for billing. Each station has a choice of radio frequencies which provide ranges out to 500Km or more.
- ☐ **St. John Ambulance station VJY Darwin** provides a similar service to the RFDS in the Northern Territory.
- ☐ **Penta Comstat VZX** located near Gosford NSW is a unique privately operated station providing long range communications for Land Mobiles travelling throughout Australia and Small Craft sailing the surrounding oceans. Emergency communications are available to all who call. Medical calls are connected to the RFDS base or medical service best placed to handle the emergency. A

- ☐ View the Map of RFDS Outpost and Marine station locations
- ☐ Times shown are daily local times

'Telstra Radphone' - 'On Call' HF Radiotelephone Services
for Marine, Air and Land Mobiles

Station Antenna Location	Radphone Channel Number	Radio Frequencies Mobile Tx kHz	Mobile Rx kHz	Voice Calling Hours	24 Hr Tone Call	24 Hour Selcall Operator Number	Beacon Number	Comments Regarding Use of Channels at each Station
LANDSDALE VIP Perth WA	427	4143	4435	24 Hours	Yes	0107	0799	Primary Voice, Selcall & Tone Call Channels used by this station
	806	8210	8734	24 Hours	Yes	0107	0799	
	1226	12305	13152	24 Hours	Yes	0107	0799	
	1604	16369	17251	0600-2200	Yes	0107	0799	
	2212	22033	22729	0600-2200	Yes	-	-	
	607	6218	6519	-	Yes	0107	0799	Secondary Channels shared by this station with all other stations
	834	8707	8707	-	Yes	0107	0799	
	1229	12314	13161	-	Yes	0107	0799	
	1610	16387	17269	-	Yes	0107	0799	
PARUP VID Darwin NT	415	4107	4399	0600-2400	Yes	0105	0599	Primary Voice, Selcall & Tone Call Channels used by this station
	811	8225	8749	0600-2400	Yes	0105	0599	
	1227	12308	13155	0600-2400	Yes	0105	0599	
	1622	16423	17305	0600-2400	Yes	0105	0599	
	607	6218	6519	-	Yes	0105	0599	Secondary Channels shared by this station with all other stations
	834	8707	8707	-	Yes	0105	0599	
	1229	12314	13161	-	Yes	0105	0599	
	1610	16387	17269	-	Yes	0105	0599	
	419	4119	4411	0600-2400	Yes	0109	0999	Secondary Voice, Selcall & Tone Call Channels shared by this station with Brisbane
	817	8243	8767	0600-2400	Yes	0109	0999	
	1231	12320	13167	0600-2400	Yes	0109	0999	
	1612	16393	17275	-	Yes	0109	0999	
NINGI VIB Brisbane QLD	419	4119	4411	24 Hours	-	-	-	Primary Voice Channels shared by this station with Darwin
	817	8243	8767	24 Hours	-	-	-	
	1231	12320	13167	24 Hours	-	-	-	
	1612	16393	17275	0800-1800	-	-	-	
	412	4098	4390	-	Yes	0104	0499	Primary Selcall & Tone Call Channels
	815	8237	8761	-	Yes	0104	0499	
	607	6218	6519	-	Yes	0104	0499	Secondary Channels shared by this station with all other stations
	834	8707	8707	-	Yes	0104	0499	
	1229	12314	13161	-	Yes	0104	0499	
	1610	16387	17269	-	Yes	0104	0499	
DOONSIDE VIS Sydney NSW	405	6218	6519	24 Hours	Yes	0108	0899	Primary Voice, Selcall & Tone call Channels used by this station
	802	8198	8722	24 Hours	Yes	0108	0899	
	1203	12236	13083	24 Hours	Yes	0108	0899	
	1602	16363	17245	24 Hours	Yes	0108	0899	
	2208	22006	22702	0600-1900	Yes	-	-	
	607	6218	6519	-	Yes	0108	0899	Secondary Channels shared by this station with all other stations
	834	8707	8707	-	Yes	0108	0899	
	1229	12314	13161	-	Yes	0108	0899	
	1610	16387	17269	-	Yes	0108	0899	
CAPE SCHANCK VIM Melbourne VIC	404	4074	4366	24 Hours	Yes	0106	0699	Primary Voice, Selcall & Tone Call Channels
	811	8225	8749	24 Hours	Yes	0106	0699	
	607	6218	6519	-	Yes	0106	0699	Secondary Channels shared by this station with all other stations
	834	8707	8707	-	Yes	0106	0699	
	1229	12314	13161	-	Yes	0106	0699	
	1610	16387	17269	-	Yes	0106	0699	

- All times shown are Local Times
- Additional Radphone Channels are available upon request by first calling on one of the above channels. (Ships may also call on 2182, 4125 or 6215 KHz.)
- Traffic Lists (Lists of callsigns for which radio-telephone calls are waiting) are broadcast on or near each even hour (local time) on Channel 834 (8707 KHz).
- Radphone Channels previously located at Townsville were re-located to Darwin and Brisbane 01.09.96.
- Radphone Channels located at Brisbane, Sydney and Melbourne are now remote controlled by operators at Ningi Queensland.

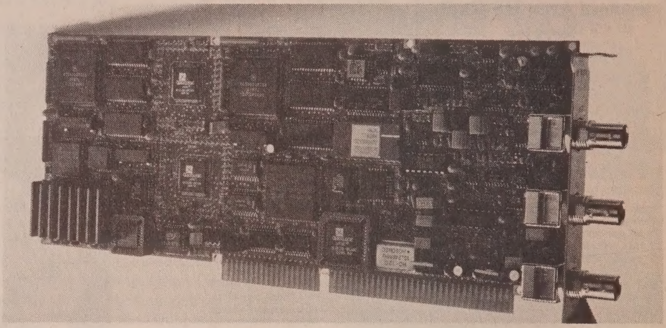
Philip Collins & Associates Pty Ltd can supply Barrett Codan Q-Mac radios for these services

- ☐ Before setting off on any journey, check with Telstra for updates to this information
- ☐ View the Map of RFDS Outpost and Marine station locations

Latest frequencies of Australian marine, outpost and remote area radio stations can be found on Collins' Internet homepage at *http://people.enternet.com.au/~pca/*

WAVECOM W41PC DSP DATA DECODER CARD DEM 5,800.-

EU: + 15 % VAT



The new WAVECOM W41PC DSP card for use inside a personal computer is a professional radio data analyser and decoder with more than **fifty** modes. This unique card allows the decoding of all conventional and advanced data, fax and teleprinter systems on HF, VHF, UHF, and SHF. The graphic user interface runs with Windows 95™ and Windows NT 95™. The powerful technology of the professional W4100DSP data decoder - that costs around 20,000 DEM and is in daily use here at Klingenfuss Radio Monitoring - has been completely integrated into the W41PC.

All essential parameters are directly selectable using easily understood icons. Additionally, all modes and setup adjustments are directly accessible from command lists and pull-down menus in the same way as for other Windows programs. This makes the W41PC software extremely easy to operate. The software includes an **excellent** code analysis function that automatically finds the centre frequency, shift, baud rate, and mode. Receiver fine tuning is not necessary, as the demodulator sets itself to the measured parameters and then decodes the received data automatically.

Two fast digital signal processors (DSP56002 / 66 MHz) operating at more than 64 MIPS (million instructions per second) ensure optimal data demodulation. This is achieved through the use of FIR filters and Hilbert transformation. With the available high theoretical calculation efficiency, every modulation type can be identified. A powerful 16/32-bit TMS34010 / 50 Mhz system processor with 4 MByte program memory - **independent** from your PC! - is used for stand-alone decoding. By this, your PC processor is free for other Windows applications such as our excellent SUPER FREQUENCY LIST ON CD-ROM. This unique principle of totally independent decoding allows the simultaneous use of up to eight W41PC cards inside your computer, for parallel monitoring of up to eight data signals at minimal cost.

All data can be saved on floppy or hard disk for later evaluation. Peripheral units of your PC, such as network connections, serial interfaces and printers, are continuously available. The all-round possibilities of PC and Windows technology allow efficient and economic data decoding and recording. The communication protocol of the W41PC card is documented and fully available for specific customers' software. A 16-bit PC-ISA interface is used for the exchange of data and commands. With the same interface, the whole user software of the three W41PC processors will be loaded, and we will provide software updates on normal **diskette**. It's that simple! What's more, the installation of the W41PC plug-in card and software is easy and requires no special skills.

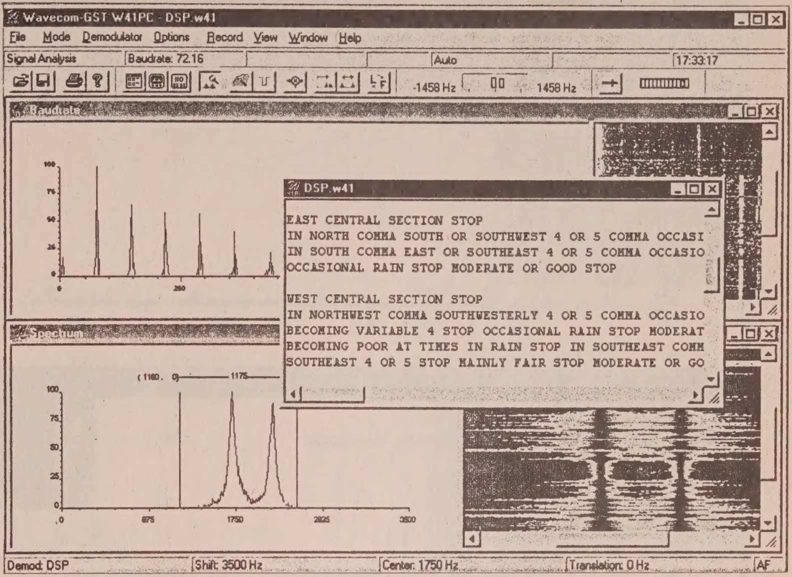
Analysis modes

- Autocorrelation
- Bit length
- FFT baud rate
- FFT real-time spectrum
- FFT real-time waterfall
- FFT shift
- IAS baud rate
- Mode
- Raw FSK data

Demodulators

- AM-Fax
- CW (Morse)
- Direct-4FFSK
- Direct-FFSK F1B
- F1B FSK mark-space
- F7B 4FSK
- GFSK
- MFSK
- PSK2
- PSK4
- PSK8

Systems



Baudrate: 72.16

```
EAST CENTRAL SECTION STOP
IN NORTH COMMA SOUTH OR SOUTHWEST 4 OR 5 COMMA OCCASI
IN SOUTH COMMA EAST OR SOUTHEAST 4 OR 5 COMMA OCCASIO
OCCASIONAL RAIN STOP MODERATE OR GOOD STOP

WEST CENTRAL SECTION STOP
IN NORTHWEST COMMA SOUTHWESTERLY 4 OR 5 COMMA OCCASIO
BECOMING VARIABLE 4 STOP OCCASIONAL RAIN STOP MODERAT
BECOMING POOR AT TIMES IN RAIN STOP IN SOUTHEAST COMM
SOUTHEAST 4 OR 5 STOP MAINLY FAIR STOP MODERATE OR GO
```

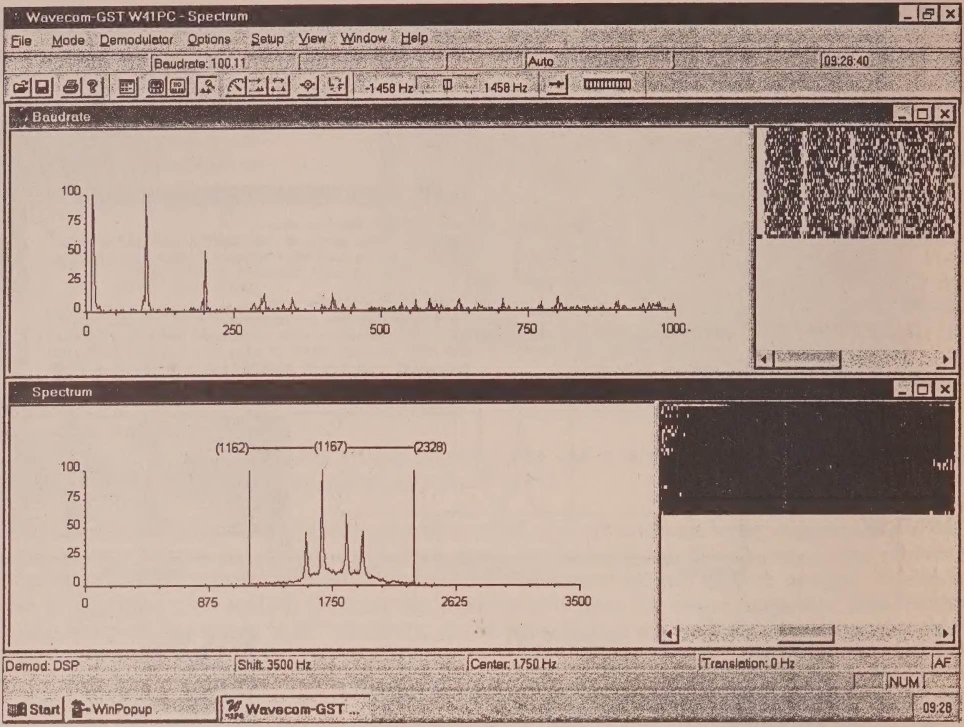
Demod: DSP
Shift: 3500 Hz
Center: 1750 Hz
Translation: 0 Hz

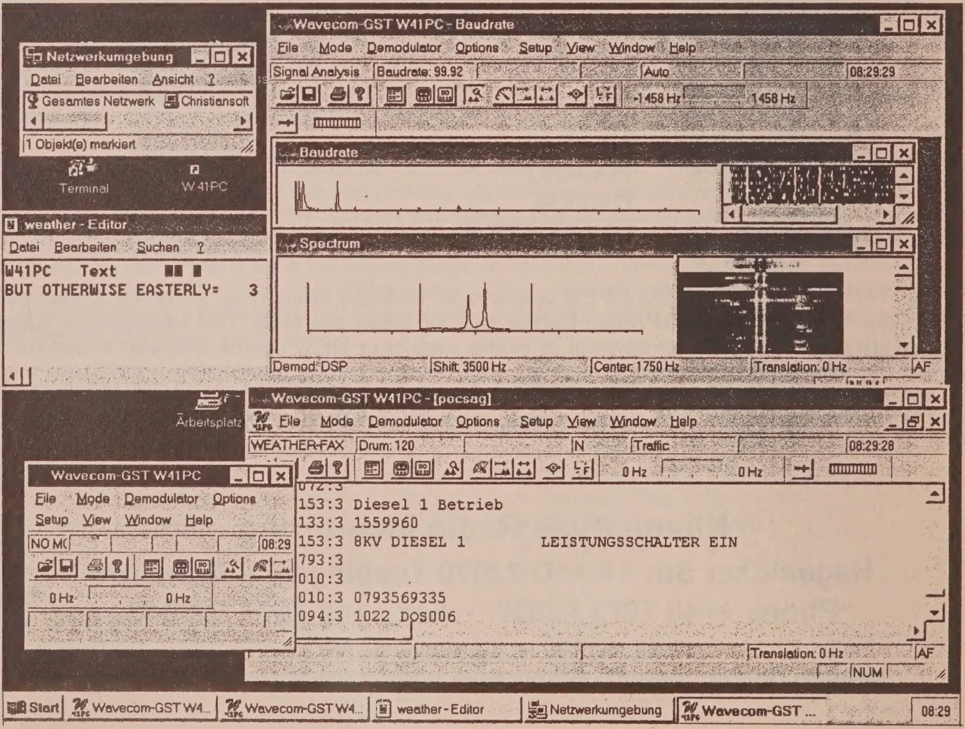
ACARS
ALIS
ARQ-E
ARQ-E3
ARQ-M2-242
ARQ-M2-342
ARQ-M4-242
ARQ-M4-342
ARQ-N
ARQ6-90
ARQ6-98
ASCII (IRA) (ITA5)
ATIS
AUTOSPEC
Baudot (ITA2)
BR6028
CALSEL
CIS-11
CIS-14
CIS-36 MFSK
Coquelet-8
Coquelet-13
Coquelet-82
CW (Morse)
DUP-ARQ
DUP-ARQ-2
DUP-FEC-2
ERMES
FEC-A
FMS-BOS
G-TOR
Golay
HC-ARQ
HNG-FEC
ICRC-PACTOR
IRA (ITA5) (ASCII)
ITA2 (Baudot)
ITA5 (IRA) (ASCII)
Meteosat-Weatherfax
Morse (CW)
MPT1327/1343
NOAA/GEOSAT-Weatherfax
Packet Radio
PACTOR-1
PACTOR-2
PACTOR-3
PACTOR-4
PACTOR-5
Piccolo-6
Piccolo-12
POCSAG
POL-ARQ
Press-Fax
Radio-Weatherfax
RUM-FEC
SELCALL
SI-ARQ
SI-FEC
SI-Auto
SITOR-A (ARQ)
SITOR-B (FEC)
SITOR-Auto
SPREAD-11
SPREAD-21
SPREAD-51
SSTV
SWED-ARQ
TWINPLEX SITOR-ARQ
UNO-PACTOR
VDEW-SELCAL
ZVEI-SELCALL

The W41PC costs 5,800 DEM (in EU countries 6,700 DEM inclusive of 15 % VAT) plus insured airfreight (approximately 100 DEM within Europe and 200 DEM overseas). This includes **free Klingenfuss publications** as well. Advance payment by money transfer or DEM chèque drawn on a German bank is required (im Inland Banküberweisung). Just fax your order to receive immediately a pro forma invoice. If you are *seriously* interested, a detailed colour brochure is available free upon request. Check our great Internet WWW homepage for some superb **sample colour screenshots** of the W41PC DSP data decoder card. ☺

Klingenfuss Radio Monitoring

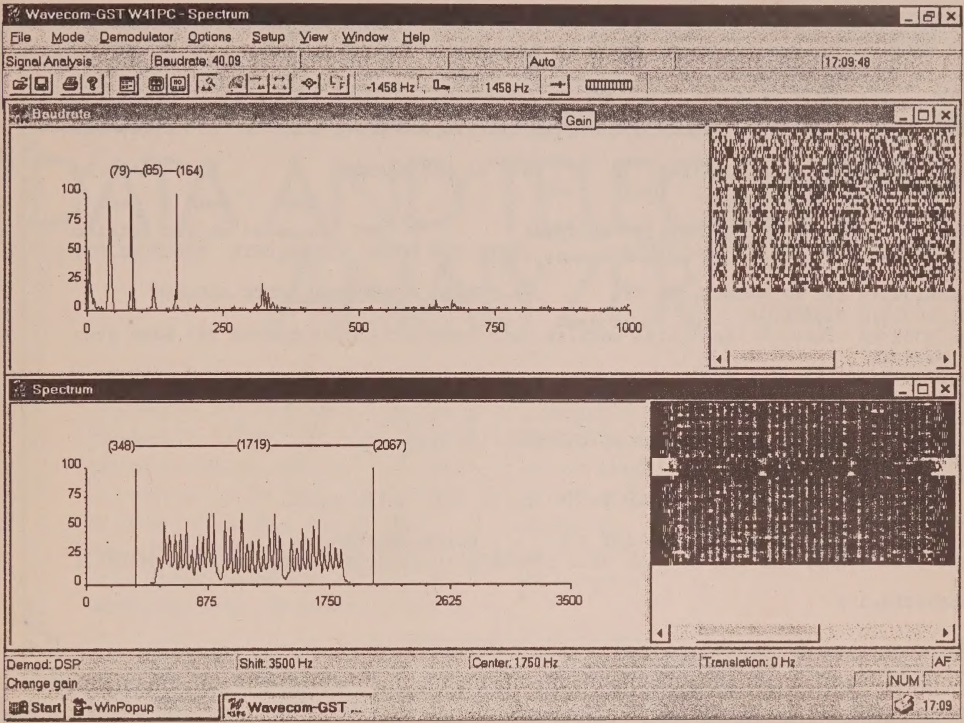
Hagenloher Str. 14 • D-72070 Tuebingen • Germany
Phone ++49 7071 62830 • Fax ++49 7071 600849
E-Mail 101550.514@compuserve.com
Internet http://ourworld.compuserve.com/homepages/Klingenfuss/


Wavecom-GST W41PC - Spectrum
File Mode Demodulator Options Setup View Window Help
Baudrate: 100.11
Auto
09:28:40
-1458 Hz
1458 Hz
Baudrate
100
75
50
25
0
0
250
500
750
1000
Spectrum
(1162)
(1167)
(2328)
100
75
50
25
0
0
875
1750
2625
3500
Demod: DSP
Shift: 3500 Hz
Center: 1750 Hz
Translation: 0 Hz
AF
NUM
Start
WinPopup
Wavecom-GST ...
09:28


Netzwerkumgebung
Datei Bearbeiten Ansicht ?
Gesamtes Netzwerk
Christiansoft
1 Objekt(e) markiert
Terminal
W 41PC
weather - Editor
Datei Bearbeiten Suchen ?
Arbeitsplatz
Wavecom-GST W41PC - Baudrate
File Mode Demodulator Options Setup View Window Help
Signal Analysis
Baudrate: 99.92
Auto
08:29:29
-1458 Hz
1458 Hz
Baudrate
Spectrum
Demod: DSP
Shift: 3500 Hz
Center: 1750 Hz
Translation: 0 Hz
AF
Wavecom-GST W41PC - [pocsag]
File Mode Demodulator Options Setup View Window Help
WEATHER-FAX
Drum: 120
N
Traffic
08:29:28
0 Hz
0 Hz
Translation: 0 Hz
AF
NUM
Wavecom-GST W41PC
File Mode Demodulator Options
Setup View Window Help
NO M(
08:29
0 Hz
0 Hz
Start
Wavecom-GST W4...
Wavecom-GST W4...
weather - Editor
Netzwerkumgebung
Wavecom-GST ...
08:29

```
W41PC    Text      ■■ ■
BUT OTHERWISE EASTERLY=    3
```

```
072:3
153:3 Diesel 1 Betrieb
133:3 1559960
153:3 8KV DIESEL 1          LEISTUNGSSCHALTER EIN
793:3
010:3
010:3 0793569335
094:3 1022 DOS006
```



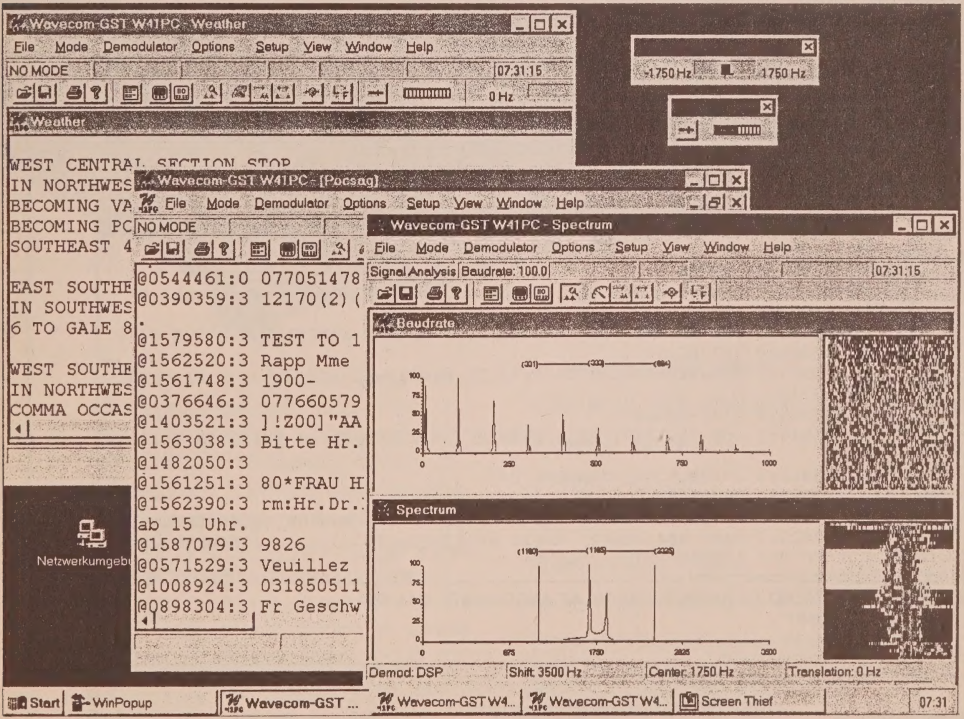
Wavecom-GST W41PC - Spectrum
File
Mode
Demodulator
Options
Setup
View
Window
Help
Baudrate
Gain
(79)—(85)—(164)
100
75
50
25
0
0
250
500
750
1000
Spectrum
(348)——(1719)——(2067)
100
75
50
25
0
0
875
1750
2625
3500
AF
NUM
Start
WinPopup
Wavecom-GST ...
17:09

Signal Analysis | Baudrate: 40.09 | Auto | 17:09:48

-1458 Hz | 1458 Hz

Demod: DSP | Shift: 3500 Hz | Center: 1750 Hz | Translation: 0 Hz

Change gain



Wavecom-GST W41PC - Weather
File
Mode
Demodulator
Options
Setup
View
Window
Help
Weather
Wavecom-GST W41PC - [Pocsag]
Wavecom-GST W41PC - Spectrum
Baudrate
100
75
50
25
0
0
250
500
750
1000
Spectrum
100
75
50
25
0
0
875
1750
2625
3500
Netzwerkumgeb
Start
WinPopup
Wavecom-GST ...
Wavecom-GST W4...
Wavecom-GST W4...
Screen Thief
07:31

NO MODE | 07:31:15

-1750 Hz | 1750 Hz

0 Hz

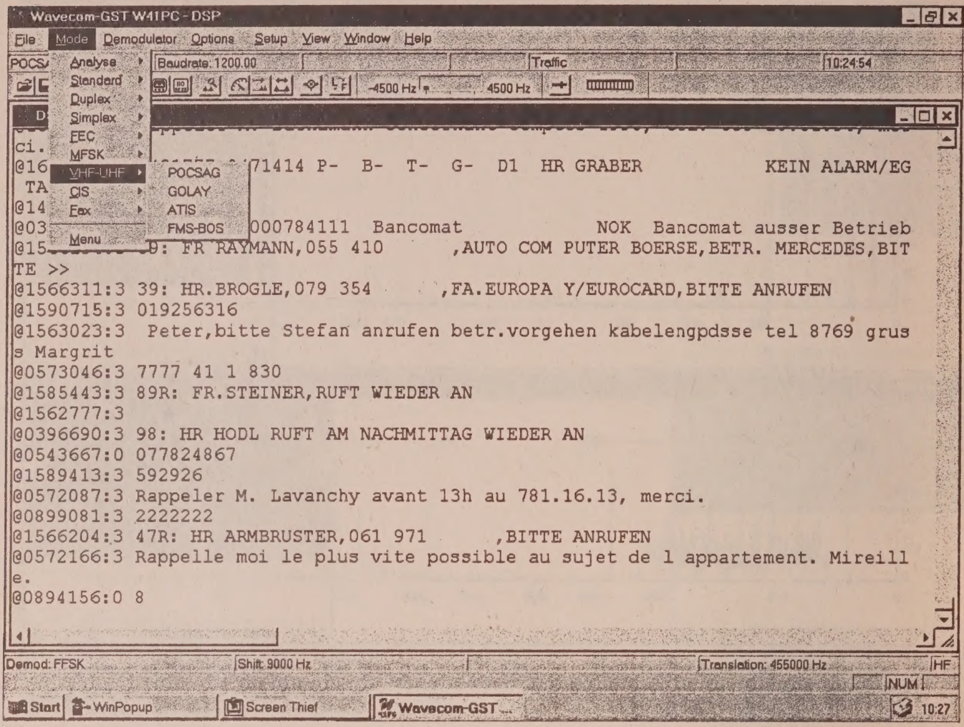
```
WEST CENTRAL SECTION STOP
IN NORTHWES
BECOMING VA
BECOMING PC
SOUTHEAST 4

EAST SOUTHE
IN SOUTHWES
6 TO GALE 8

WEST SOUTHE
IN NORTHWES
COMMA OCCAS
```

NO MODE

```
@0544461:0 077051478
@0390359:3 12170(2)(
.
@1579580:3 TEST TO 1
@1562520:3 Rapp Mme
@1561748:3 1900-
@0376646:3 077660579
@1403521:3 ]!Z00]"AA
@1563038:3 Bitte Hr.
@1482050:3
@1561251:3 80*FRAU H
@1562390:3 rm:Hr.Dr.
ab 15 Uhr.
@1587079:3 9826
@0571529:3 Veuillez
@1008924:3 031850511
@0898304:3 Fr Geschw
```

Signal Analysis | Baudrate: 100.0 | 07:31:15

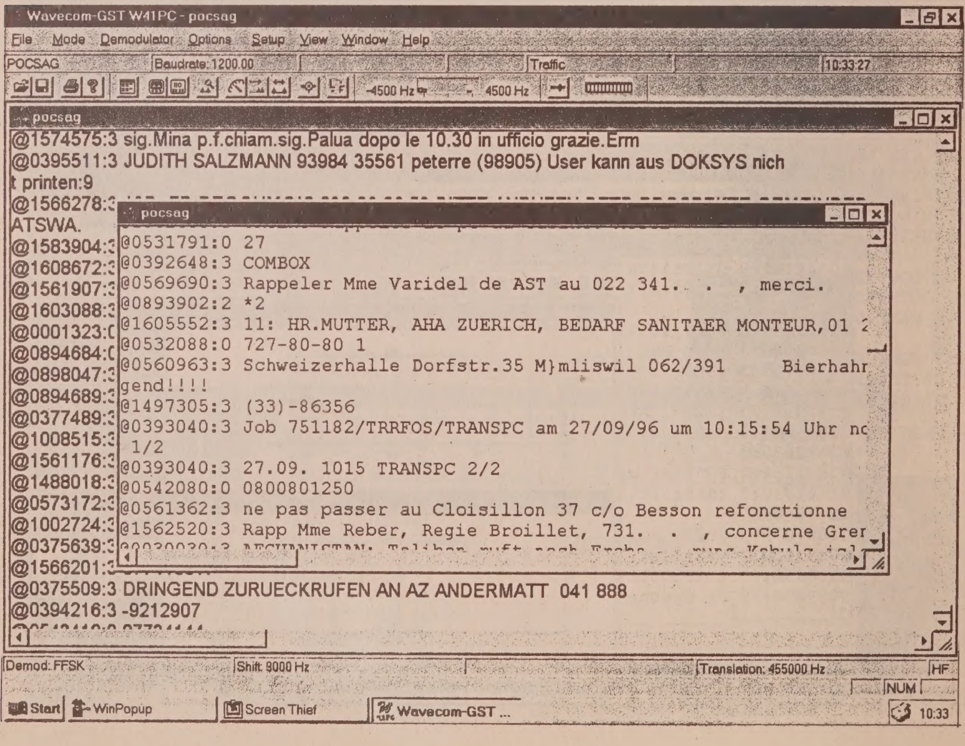
Demod: DSP | Shift: 3500 Hz | Center: 1750 Hz | Translation: 0 Hz


Wavecom-GST W41PC - DSP
File
Mode
Demodulator
Options
Setup
View
Window
Help
POCSA
Analyse
Standard
Duplex
Simplex
FEC
MFSK
VHF-UHF
CIS
Fax
Menu
POCSAG
GOLAY
ATIS
FMS-BOS
Traffic
10:24:54
-4500 Hz
4500 Hz
D
HF
NUM
Start
WinPopup
Screen Thief
Wavecom-GST ...
10:27

Baudrate: 1200.00

```
ci.
@16          71414 P-   B-   T-   G-   D1   HR GRABER           KEIN ALARM/EG
 TA
@14
@03              000784111  Bancomat              NOK  Bancomat ausser Betrieb
@15          9: FR RAYMANN,055 410       ,AUTO COM PUTER BOERSE,BETR. MERCEDES,BIT
TE >>
@1566311:3 39: HR.BROGLE,079 354      ,FA.EUROPA Y/EUROCARD,BITTE ANRUFEN
@1590715:3 019256316
@1563023:3  Peter,bitte Stefan anrufen betr.vorgehen kabelengpdsse tel 8769 grus
s Margrit
@0573046:3 7777 41 1 830
@1585443:3 89R: FR.STEINER,RUFT WIEDER AN
@1562777:3
@0396690:3 98: HR HODL RUFT AM NACHMITTAG WIEDER AN
@0543667:0 077824867
@1589413:3 592926
@0572087:3 Rappeler M. Lavanchy avant 13h au 781.16.13, merci.
@0899081:3 2222222
@1566204:3 47R: HR ARMBRUSTER,061 971       ,BITTE ANRUFEN
@0572166:3 Rappelle moi le plus vite possible au sujet de l appartement. Mireill
e.
@0894156:0 8
```

Demod: FFSK
Shift: 9000 Hz
Translation: 455000 Hz


Wavecom-GST W41PC - pocsag
File
Mode
Demodulator
Options
Setup
View
Window
Help
POCSAG
Traffic
10:33:27
-4500 Hz
4500 Hz
pocsag
pocsag
HF
NUM
Start
WinPopup
Screen Thief
Wavecom-GST ...
10:33

Baudrate: 1200.00

```
@1574575:3 sig.Mina p.f.chiam.sig.Palua dopo le 10.30 in ufficio grazie.Erm
@0395511:3 JUDITH SALZMANN 93984 35561 peterre (98905) User kann aus DOKSYS nich
t printen:9
@1566278:3
ATSWA.
@1583904:3
@1608672:3
@1561907:3
@1603088:3
@0001323:0
@0894684:0
@0898047:3
@0894689:3
@0377489:3
@1008515:3
@1561176:3
@1488018:3
@0573172:3
@1002724:3
@0375639:3
@1566201:3
@0375509:3 DRINGEND ZURUECKRUFEN AN AZ ANDERMATT  041 888
@0394216:3 -9212907
```

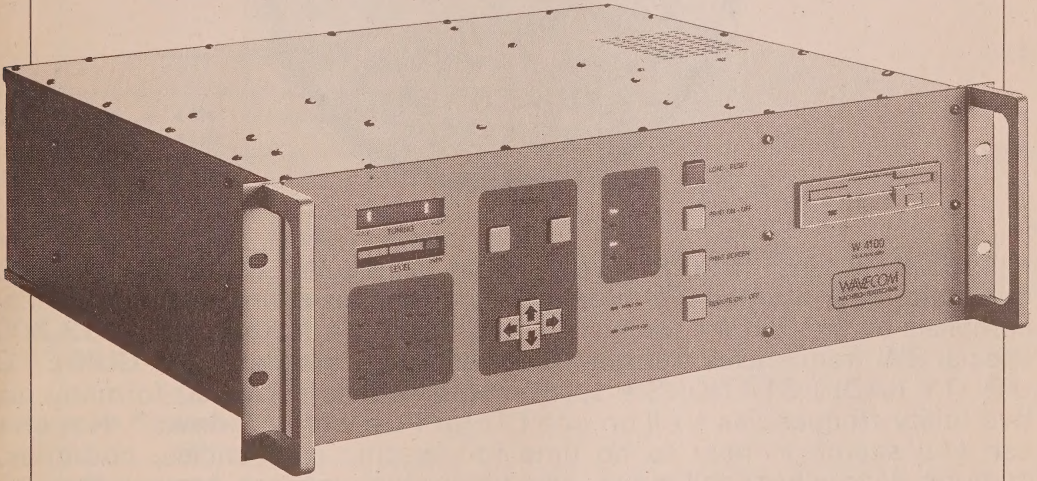
```
@0531791:0 27
@0392648:3 COMBOX
@0569690:3 Rappeler Mme Varidel de AST au 022 341..  .   , merci.
@0893902:2 *2
@1605552:3 11: HR.MUTTER, AHA ZUERICH, BEDARF SANITAER MONTEUR,01 2
@0532088:0 727-80-80 1
@0560963:3 Schweizerhalle Dorfstr.35 M}mliswil 062/391      Bierhahr
gend!!!!
@1497305:3 (33)-86356
@0393040:3 Job 751182/TRRFOS/TRANSPC am 27/09/96 um 10:15:54 Uhr nc
 1/2
@0393040:3 27.09. 1015 TRANSPC 2/2
@0542080:0 0800801250
@0561362:3 ne pas passer au Cloisillon 37 c/o Besson refonctionne
@1562520:3 Rapp Mme Reber, Regie Broillet, 731.   .   , concerne Grer
```

Demod: FFSK
Shift: 9000 Hz
Translation: 455000 Hz

WAVECOM W 4100
DATA AND TELEGRAPH ANALYZER

The construction is based on many years of experience in these areas. Like earlier devices developed by WAVECOM weight has been placed on making the operation of the device as simple as possible. The use of a track ball or mouse and easy-to-understand screen menus facilitates the operation of the software in the shortest possible time and without much starting knowledge. The powerful graphics of the W 4100 - VGA 640x480 pixels - offers ideal technical preconditions for all kinds of graphical presentations. Utilizing a powerful TMS 34010 32 bit processor, 4 MB RAM (expandable to 8 MB) and running at about 6 MIPS gives enough performance overhead. All of the W 4100 software has been written in the widely used high level programming language C. Software is loaded by way of a 3 1/2" floppy drive so updating the software is without any problems. For special uses the user as an option is able to work with the built-in erasable memory.

The W 4100 data and telegraph decoder and analyzer was developed for deployment within three operational areas,
- Data and telegraph code analysis
- Automatic monitoring of data and telegraph transmissions
- Development of software for telegraph and data reception



for more information contact
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Table 1 - MMS SSB duplex transmitting frequencies [in kHz]

Channel No.	4 MHz Band			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
401	4 357	4 358,4	4 065	4 066,4
402	4 360	4 361,4	4 068	4 069,4
403	4 363	4 364,4	4 071	4 072,4
404	4 366	4 367,4	4 074	4 075,4
405	4 369	4 370,4	4 077	4 078,4
406	4 372	4 373,4	4 080	4 081,4
407	4 375	4 376,4	4 083	4 084,4
408	4 378	4 379,4	4 086	4 087,4
409	4 381	4 382,4	4 089	4 090,4
410	4 384	4 385,4	4 092	4 093,4
411	4 387	4 388,4	4 095	4 096,4
412	4 390	4 391,4	4 098	4 099,4
413	4 393	4 394,4	4 101	4 102,4
414	4 396	4 397,4	4 104	4 105,4
415	4 399	4 400,4	4 107	4 108,4
416	4 402	4 403,4	4 110	4 111,4
417	4 405	4 406,4	4 113	4 114,4
418	4 408	4 409,4	4 116	4 117,4
419	4 411	4 412,4	4 119	4 120,4
420	4 414	4 415,4	4 122	4 123,4
421	4 417*	4 418,4*	4 125*[4]	4 126,4*
422	4 420	4 421,4	4 128	4 129,4
423	4 423	4 424,4	4 131	4 132,4
424	4 426	4 427,4	4 134	4 135,4
425	4 429	4 430,4	4 137	4 138,4
426	4 432	4 433,4	4 140	4 141,4
427[2]	4 435	4 436,4	4 143	4 144,4
428[1,2,3]	4 351	4 352,4	–	–
429[1,2,3]	4 354	4 355,4	–	–

Channel No.	6 MHz Band			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
601	6 501	6 502,4	6 200	6 201,4
602	6 504	6 505,4	6 203	6 204,4
603	6 507	6 508,4	6 206	6 207,4
604	6 510	6 511,4	6 209	6 210,4
605	6 513	6 514,4	6 212	6 213,4
606	6 516*	6 517,4*	6 215*[5]	6 216,4*
607[2]	6 519	6 520,4	6 218	6 219,4
608[2]	6 522	6 523,4	6 221	6 222,4

Channel No.	8 MHz Band			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
801	8 719	8 720,4	8 195	8 196,4
802	8 722	8 723,4	8 198	8 199,4
803	8 725	8 726,4	8 201	8 202,4
804	8 728	8 729,4	8 204	8 205,4
805	8 731	8 732,4	8 207	8 208,4
806	8 734	8 735,4	8 210	8 211,4
807	8 737	8 738,4	8 213	8 214,4
808	8 740	8 741,4	8 216	8 217,4
809	8 743	8 744,4	8 219	8 220,4
810	8 746	8 747,4	8 222	8 223,4
811	8 749	8 750,4	8 225	8 226,4
812	8 752	8 753,4	8 228	8 229,4
813	8 755	8 756,4	8 231	8 232,4
814	8 758	8 759,4	8 234	8 235,4
815	8 761	8 762,4	8 237	8 238,4
816	8 764	8 765,4	8 240	8 241,4
817	8 767	8 768,4	8 243	8 244,4
818	8 770	8 771,4	8 246	8 247,4
819	8 773	8 774,4	8 249	8 250,4
820	8 776	8 777,4	8 252	8 253,4
821	8 779*	8 780,4*	8 255*	8 256,4*
822	8 782	8 783,4	8 258	8 259,4
823	8 785	8 786,4	8 261	8 262,4
824	8 788	8 789,4	8 264	8 265,4
825	8 791	8 792,4	8 267	8 268,4
826	8 794	8 795,4	8 270	8 271,4
827	8 797	8 798,4	8 273	8 274,4
828	8 800	8 801,4	8 276	8 277,4
829	8 803	8 804,4	8 279	8 280,4
830	8 806	8 807,4	8 282	8 283,4
831	8 809	8 810,4	8 285	8 286,4
832[2]	8 812	8 813,4	8 288	8 289,4
833	8 291[7]	8 292,4	8 291[7]	8 292,4
834[2,3,6]	8 707	8 708,4	–	–
835[2,3,6]	8 710	8 711,4	–	–
836[2,3,6]	8 713	8 714,4	–	–
837[2,3,6]	8 716	8 717,4	–	–

Channel No.	12 MHz Band			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
1201	13 077	13 078,4	12 230	12 231,4
1202	13 080	13 081,4	12 233	12 234,4
1203	13 083	13 084,4	12 236	12 237,4
1204	13 086	13 087,4	12 239	12 240,4
1205	13 089	13 090,4	12 242	12 243,4
1206	13 092	13 093,4	12 245	12 246,4
1207	13 095	13 096,4	12 248	12 249,4
1208	13 098	13 099,4	12 251	12 252,4
1209	13 101	13 102,4	12 254	12 255,4
1210	13 104	13 105,4	12 257	12 258,4
1211	13 107	13 108,4	12 260	12 261,4
1212	13 110	13 111,4	12 263	12 264,4
1213	13 113	13 114,4	12 266	12 267,4
1214	13 116	13 117,4	12 269	12 270,4
1215	13 119	13 120,4	12 272	12 273,4
1216	13 122	13 123,4	12 275	12 276,4
1217	13 125	13 126,4	12 278	12 279,4
1218	13 128	13 129,4	12 281	12 282,4
1219	13 131	13 132,4	12 284	12 285,4
1220	13 134	13 135,4	12 287	12 288,4
1221	13 137*	13 138,4*	12 290*[8]	12 291,4*
1222	13 140	13 141,4	12 293	12 294,4
1223	13 143	13 144,4	12 296	12 297,4
1224	13 146	13 147,4	12 299	12 300,4
1225	13 149	13 150,4	12 302	12 303,4
1226	13 152	13 153,4	12 305	12 306,4
1227	13 155	13 156,4	12 308	12 309,4
1228	13 158	13 159,4	12 311	12 312,4
1229	13 161	13 162,4	12 314	12 315,4
1230	13 164	13 165,4	12 317	12 318,4
1231	13 167	13 168,4	12 320	12 321,4
1232	13 170	13 171,4	12 323	12 324,4
1233 }	13 173	13 174,4	12 326	12 327,4
1234 }	13 176	13 177,4	12 329	12 330,4
1235 }	13 179	13 180,4	12 332	12 333,4
1236 }	13 182	13 183,4	12 335	12 336,4
1237 } 2	13 185	13 186,4	12 338	12 339,4
1238 }	13 188	13 189,4	12 341	12 342,4
1239 }	13 191	13 192,4	12 344	12 345,4
1240 }	13 194	13 195,4	12 347	12 348,4
1241 }	13 197	13 198,4	12 350	12 351,4

Channel No.	16 MHz Band			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
1601	17 242	17 243,4	16 360	16 361,4
1602	17 245	17 246,4	16 363	16 364,4
1603	17 248	17 249,4	16 366	16 367,4
1604	17 251	17 252,4	16 369	16 370,4
1605	17 254	17 255,4	16 372	18 373,4
1606	17 527	17 258,4	16 375	16 376,4
1607	17 260	17 261,4	16 378	16 379,4
1608	17 263	17 264,4	16 381	16 382,4
1609	17 266	17 267,4	16 384	16 385,4
1610	17 269	17 270,4	16 387	16 388,4
1611	17 272	17 273,4	16 390	16 391,4
1612	17 275	17 276,4	16 393	16 394,4
1613	17 278	17 279,4	16 396	16 397,4
1614	17 281	17 282,4	16 399	16 400,4
1615	17 284	17 285,4	16 402	16 403,4
1616	17 287	17 288,4	16 405	16 406,4
1617	17 290	17 291,4	16 408	16 409,4
1618	17 293	17 294,4	16 411	16 412,4
1619	17 296	17 297,4	16 414	16 415,4
1620	17 299	17 300,4	16 417	16 418,4
1621	17 302*	17 303,4*	16 420*[9]	16 421,4*
1622	17 305	17 306,4	16 423	16 424,4
1623	17 308	17 309,4	16 426	16 427,4
1624	17 311	17 312,4	16 429	16 430,4
1625	17 314	17 315,4	16 432	16 433,4
1626	17 317	17 318,4	16 435	16 436,4
1627	17 320	17 321,4	16 438	16 439,4
1628	17 323	17 324,4	16 441	16 442,4
1629	17 326	17 327,4	16 444	16 445,4
1630	17 329	17 330,4	16 447	16 448,4
1631	17 332	17 333,4	16 450	16 451,4
1632	17 335	17 336,4	16 453	16 454,4
1633	17 338	17 339,4	16 456	16 457,4
1634	17 341	17 342,4	16 459	16 460,4
1635	17 344	17 345,4	16 462	16 463,4
1636	17 347	17 348,4	16 465	16 466,4
1637	17 350	17 351,4	16 468	16 469,4
1638	17 353	17 354,4	16 471	16 472,4
1639	17 356	17 357,4	16 474	16 475,4
1640	17 359	17 360,4	16 477	16 478,4
1641	17 362	17 363,4	16 480	16 481,4
1642 }	17 365	17 366,4	16 483	16 484,4
1643 }	17 368	17 369,4	16 486	16 487,4
1644 }	17 371	17 372,4	16 489	16 490,4
1645 }	17 374	17 375,4	16 492	16 493,4
1646 }	17 377	17 378,4	16 495	16 496,4
1647 }	17 380	17 381,4	16 498	16 499,4
1648 }	17 383	17 384,4	16 501	16 502,4
1649 } 2	17 386	17 387,4	16 504	16 505,4
1650 }	17 389	17 390,4	16 507	16 508,4
1651 }	17 392	17 393,4	16 510	16 511,4
1652 }	17 395	17 396,4	16 513	16 514,4
1653 }	17 398	17 399,4	16 516	16 517,4
1654 }	17 401	17 402,4	16 519	16 520,4
1655 }	17 404	17 405,4	16 522	16 523,4
1656 }	17 407	17 408,4	16 525	16 526,4

Channel No.	18/19 MHz Band			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
1801 }	19 755	19 756,4	18 780	18 781,4
1802 }	19 758	19 759,4	18 783	18 784,4
1803 } 2	19 761	19 762,4	18 786	18 787,4
1804 }	19 764	19 765,4	18 789	18 790,4
1805 }	19 767	19 768,4	18 792	18 793,4
1806	19 770*	19 771,4*	18 795*	18 796,4*
1807 }	19 773	19 774,4	18 798	18 799,4
1808 }	19 776	19 777,4	18 801	18 802,4
1809 }	19 779	19 780,4	18 804	18 805,4
1810 } 2	19 782	19 783,4	18 807	18 808,4
1811 }	19 785	19 786,4	18 810	18 811,4
1812 }	49 788	19 789,4	18 813	18 814,4
1813 }	19 791	19 792,4	18 816	18 817,4
1814 }	19 794	19 795,4	18 819	18 820,4
1815 }	19 797	19 798,4	18 822	18 823,4

Channel No.	22 MHz Band			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
2201	22 696	22 697,4	22 000	22 001,4
2202	22 699	22 700,4	22 003	22 004,4
2203	22 702	22 703,4	22 006	22 007,4
2204	22 705	22 706,4	22 009	22 010,4
2205	22 708	22 709,4	22 012	22 013,4
2206	22 711	22 712,4	22 015	22 016,4
2207	22 714	22 715,4	22 018	22 019,4
2208	22 717	22 718,4	22 021	22 022,4
2209	22 720	22 721,4	22 024	22 025,4
2210	22 723	22 724,4	22 027	22 028,4
2211	22 726	22 727,4	22 030	22 031,4
2212	22 729	22 730,4	22 033	22 034,4
2213	22 732	22 733,4	22 036	22 037,4
2214	22 735	22 736,4	22 039	22 040,4
2215	22 738	22 739,4	22 042	22 043,4
2216	22 741	22 742,4	22 045	22 046,4
2217	22 744	22 745,4	22 048	22 049,4
2218	22 747	22 748,4	22 051	22 052,4
2219	22 750	22 751,4	22 054	22 055,4
2220	22 753	22 754,4	22 057	22 058,4
2221	22 756*	22 757,4*	22 060*	22 061,4*
2222	22 759	22 760,4	22 063	22 064,4
2223	22 762	22 763,4	22 066	22 067,4
2224	22 765	22 766,4	22 069	22 070,4
2225	22 768	22 769,4	22 072	22 073,4
2226	22 771	22 772,4	22 075	22 076,4
2227	22 774	22 775,4	22 078	22 079,4
2228	22 777	22 778,4	22 081	22 082,4
2229	22 780	22 781,4	22 084	22 085,4
2230	22 783	22 784,4	22 087	22 088,4
2231	22 786	22 787,4	22 090	22 091,4
2232	22 789	22 790,4	22 093	22 094,4
2233	22 792	22 793,4	22 096	22 097,4
2234	22 795	22 796,4	22 099	22 100,4
2235	22 798	22 799,4	22 102	22 103,4
2236	22 801	22 802,4	22 105	22 106,4
2237	22 804	22 805,4	22 108	22 109,4
2238	22 807	22 808,4	22 111	22 112,4
2239	22 810	22 811,4	22 114	22 115,4
2240	22 813	22 814,4	22 117	22 118,4
2241 }	22 816	22 817,4	22 120	22 121,4
2242 }	22 819	22 820,4	22 123	22 124,4
2243 }	22 822	22 823,4	22 126	22 127,4
2244 }	22 825	22 826,4	22 129	22 130,4
2245 }	22 828	22 829,4	22 132	22 133,4
2246 }	22 831	22 832,4	22 135	22 136,4
2247 } 2	22 834	22 835,4	22 138	22 139,4
2248 }	22 837	22 838,4	22 141	22 142,4
2249 }	22 840	22 841,4	22 144	22 145,4
2250 }	22 843	22 844,4	22 147	22 148,4
2251 }	22 846	22 847,4	22 150	22 151,4
2252 }	22 849	22 850,4	22 153	22 154,4
2253 }	22 852	22 853,4	22 156	22 157,4

Channel No.	25/26 MHz Band			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
2501 }	26 145	26 146,4	25 070	25 071,4
2502 }	26 148	26 149,4	25 073	25 074,4
2503 }	26 151	26 152,4	25 076	25 077,4
2504 }	26 154	26 155,4	25 079	25 080,4
2505 } 2	26 157	26 158,4	25 082	25 083,4
2506 }	26 160	26 161,4	25 085	25 086,4
2507 }	26 163	26 164,4	25 088	25 089,4
2508 }	26 166	26 167,4	25 091	25 092,4
2509 }	26 169	26 170,4	25 094	25 095,4
2510	26 172*	26 173,4*	25 097*	25 098,4*

Table 2A - MMS sub-bands [in kHz]

Band MHz	Limits kHz	Frequencies assignable to ship stations for oceanographic data transmission	Limits kHz	Frequencies assignable to ship stations for telephony, duplex operation	Limits kHz	Frequencies assignable to ship and coast stations for telephony, simplex operation	Limits kHz	Frequencies assignable to ship stations for wide-band telegraphy, facsimile and special transmission systems	Limits kHz	Frequencies assignable to ship stations for oceanographic data transmission	Limits kHz	Frequencies (paired) assignable to ship stations for NBDP telegraphy and data transmission systems at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK	Limits kHz	Calling frequencies assignable to ship stations for A1A or A1B Morse telegraphy	Limits kHz	Frequencies (paired) assignable to ship stations for NBDP telegraphy and data transmission systems at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK	Limits kHz	Working frequencies assignable to ship stations for A1A or A1B Morse telegraphy	Limits kHz	Calling frequencies assignable to ship stations for A1A or A1B Morse telegraphy	Limits kHz
		c)		*a)* *i)*		*a)*				*c)*		*d)* *j)* *m)*		*g)*		*d)* *m)*		*e)* *f)* *h)*		*g)*	
4	4 063	**4 063.3 – 4 064.8** 6 f. 0.3 kHz	4 065	**4 066.4 – 4 144.4** 27 f. 3 kHz	4 146	**4 147.4 – 4 150.4** 2 f. 3 kHz	4 152	**4 154 – 4 170** 5 f. 4 kHz	4 172	✕	4 172	**4 172.5 – 4 181.5** 18 f. 0,5 kHz	4 181.75		4 186.75	✕	4 186.75	**4 187 – 4 202** 31 f. 0,5 kHz	4 202.25		4 202.25
6	6 200	✕	6 200	**6 201.4 – 6 222.4** 8 f. 3 kHz	6 224	**6 225.4 – 6 231.4** 3 f. 3 kHz	6 233	**6 235 – 6 259** 7 f. 4 kHz	6 261	**6 261.3 – 6 262.5** 5 f. 0.3 kHz	6 262.75	**6 263 – 6 275.5** 25 f. 0.5 kHz	6 275.75		6 280.75	**6 281 – 6 284.5** 8 f. 0.5 kHz	6 284.75	**6 285 – 6 300** 31 f. 0.5 kHz	6 300.25	✕	6 300.25
8	8 195	✕	8 195	**8 196.4 – 8 292.4** 33 f. 3 kHz	8 294	**8 295.4 – 8 298.4** 2 f. 3 kHz	8 300	**8 302 – 8 338** 10 f. 4 kHz	8 340	**8 340.3 – 8 341.5** 5 f. 0.3 kHz	8 341.75	✕	8 341.75	✕	8 341.75	✕	8 341.75	**8 342 – 8 365.5** 48 f. 0.5 kHz	8 365.75		8 370.75
12	12 230	✕	12 230	**12 231.4 – 12 351.4** 41 f. 3 kHz	12 353	**12 354.4 – 12 366.4** 5 f. 3 kHz	12 368	**12 370 – 12 418** 13 f. 4 kHz	12 420	**12 420.3 – 12 421.5** 5 f. 0.3 kHz	12 421.75	✕	12 421.75	✕	12 421.75	✕	12 421.75	**12 422 – 12 476.5** 110 f. 0.5 kHz	12 476.75	✕	12 476.75
16	16 360	✕	16 360	**16 361.4 – 16 526.4** 56 f. 3 kHz	16 528	**16 529.4 – 16 547.4** 7 f. 3 kHz	16 549	**16 551 – 16 615** 17 f. 4 kHz	16 617	**16 617.3 – 16 618.5** 5 f. 0.3 kHz	16 618.75	✕	16 618.75	✕	16 618.75	✕	16 618.75	**16 619 – 16 683** 129 f. 0.5 kHz	16 683.25	✕	16 683.25
18/19	18 780	✕	18 780	**18 781.4 – 18 823.4** 15 f. 3 kHz	18 825	**18 826.4 – 18 844.4** 7 f. 3 kHz	18 846	**18 848 – 18 868** 6 f. 4 kHz	18 870	✕	18 870	✕	18 870	✕	18 870	✕	18 870	✕	18 870	✕	18 870
22	22 000	✕	22 000	**22 001.4 – 22 157.4** 53 f. 3 kHz	22 159	**22 160.4 – 22 178.4** 7 f. 3 kHz	22 180	**22 182 – 22 238** 15 f. 4 kHz	22 240	**22 240.3 – 22 241.5** 5 f. 0.3 kHz	22 241.75	✕	22 241.75	✕	22 241.75	✕	22 241.75	**22 242 – 22 279** 75 f. 0.5 kHz	22 279.25		22 284.25
25/26	25 070	✕	25 070	**25 071.4 – 25 098.4** 10 f. 3 kHz	25 100	**25 101.4 – 25 119.4** 7 f. 3 kHz	25 121	**25 123 – 25 159** 10 f. 4 kHz	25 161.25	✕	25 161.25	✕	25 161.25	✕	25 161.25	✕	25 161.25	**25 161.5 – 25 171** 20 f. 0.5 kHz	25 171.25		25 172.75

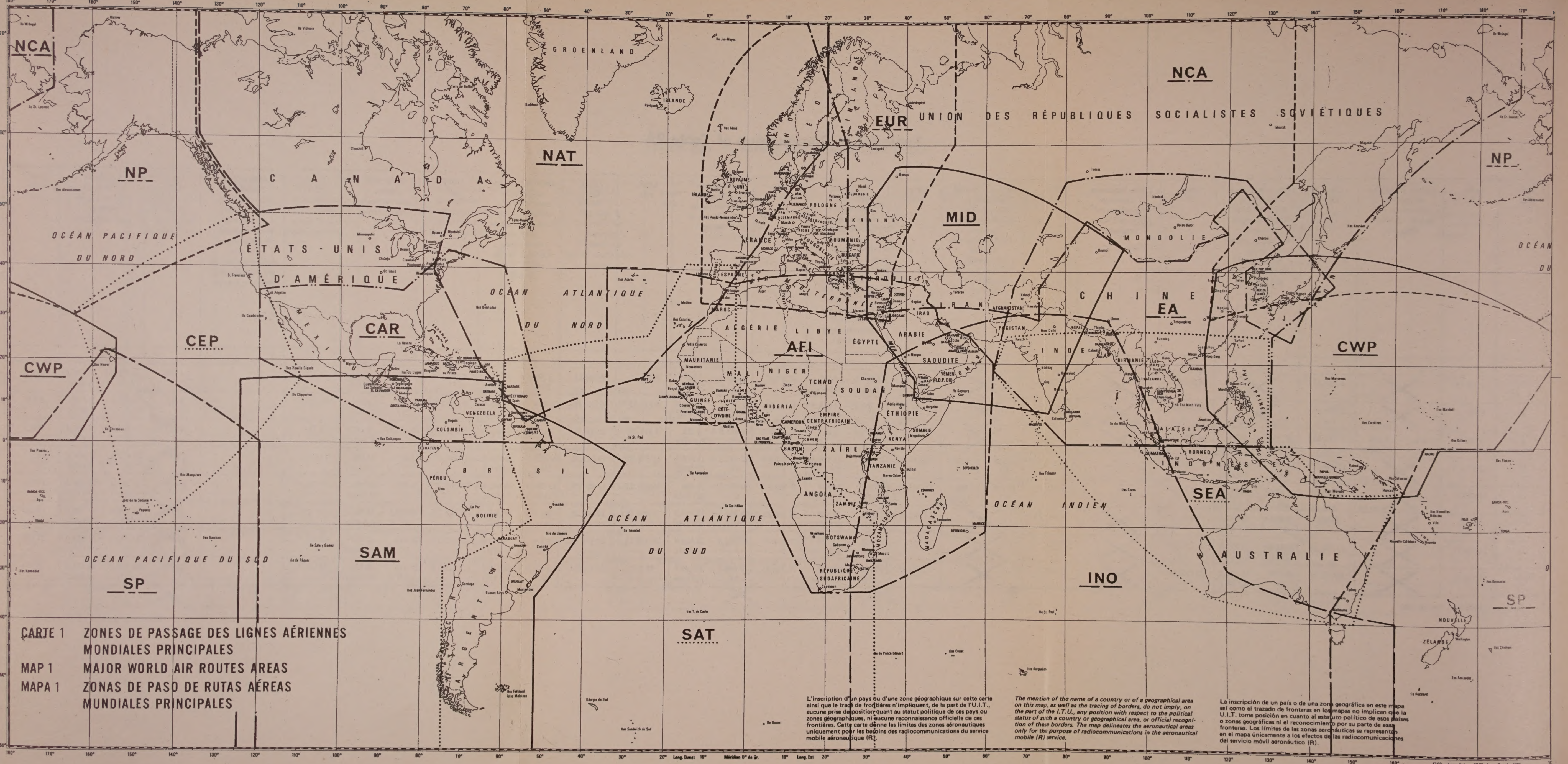
f. = fréquences/frequencies/frecuencias

(continued)

Table 2B - Continuation of Table 2A

Bands MHz	Limits kHz	Working frequencies assignable to ship stations for A1A or A1B Morse telegraphy	Limits kHz	Frequencies (paired) assignable to ship stations for NBDP telegraphy and data transmission systems at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK	Limits kHz	Calling frequencies assignable to ship stations for A1A or A1B Morse telegraphy	Limits kHz	Frequencies (paired) assignable to ship stations for NBDP telegraphy and data transmission systems at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK	Limits kHz	Frequencies (non-paired) assignable to ship stations for NBDP telegraphy and data transmission systems at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK and for A1A or A1B Morse telegraphy (working)	Limits kHz	Frequencies assignable to ship stations for Digital Selective Calling	Limits kHz	Limits kHz	Frequencies (paired) assignable to coast stations for NBDP and data transmission systems, at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK	Limits kHz	Frequencies assignable to coast stations for digital selective calling	Limits kHz	Frequencies assignable to coast stations for wide-band and A1A or A1B Morse telegraphy, facsimile, special and data transmission systems and direct-printing telegraphy systems	Limits kHz	Frequencies assignable to coast stations for telephony, duplex operation	Limits kHz
		e) f)		*d) j) m)*		*g)*		*d) m)*		*b)*		*k) l)*			*d) n) o)*		*l)*				*a)*	
4	4 202.25	X	4 202.25	X	4 202.25	X	4 202.25	X	4 202.25	**4 202.5 – 4 207** 10 f. 0.5kHz	4 207.25	**4 207.5 – 4 209** 4 f. 0.5 kHz	4 209.25	4 209.25	**4 209.5 – 4 219** 20 f. 0.5 kHz	4 219.25	**4 219.5 – 4 220.5** 3 f. 0.5 kHz	4 221		4 351	**4 352.4 – 4 436.4** 29 f. 3 kHz	4 438
6	6 300.25	X	6 300.25	X	6 300.25	X	6 300.25	X	6 300.25	**6 300.5 – 6 311.5** 23 f. 0.5 kHz	6 311.75	**6 312 – 6 313.5** 4 f. 0.5 kHz	6 313.75	6 313.75	**6 314 – 6 330.5** 34 f. 0.5 kHz	6 330.75	**6 331 – 6 332** 3 f. 0.5 kHz	6 332.5		6 501	**6 502.4 – 6 523.4** 8 f. 3 kHz	6 525
8	8 370.75	**8 371 – 8 376** 11 f. 0.5 kHz	8 376.25	**8 376.5 – 8 396** 40 f. 0.5 kHz	8 396.25	X	8 396.25	X	8 396.25	**8 396.5 – 8 414** 36 f. 0.5 kHz	8 414,25	**8 414.5 – 8 416** 4 f. 0.5 kHz	8 416.25	8 416.25	**8 416.5 – 8 436** 40 f. 0.5 kHz	8 436.25	**8 436.5 – 8 437.5** 3 f. 0.5 kHz	8 438		8 707	**8 708.4 – 8 813.4** 36 f. 3 kHz	8 815
12	12 476.75	X	12 476.75	**12 477 – 12 549.5** 146 f. 0.5 kHz	12 549.75		12 554.75	**12 555 – 12 559.5** 10 f. 0.5 kHz	12 559.75	**12 560 – 12 576.5** 34 f. 0.5 kHz	12 576.75	**12 577 – 12 578.5** 4 f. 0.5 kHz	12 578.75	12 578.75	**12 579 – 12 656.5** 156 f. 0.5 kHz	12 656.75	**12 657 – 12 658** 3 f. 0.5 kHz	12 658.5		13 077	**13 078.4 – 13 198.4** 41 f. 3 kHz	13 200
16	16 683.25	X	16 683.25	**16 683.5 – 16 733.5** 101 f. 0.5 kHz	16 733.75		16 738.75	**16 739 –16 784.5** 92 f. 0.5 kHz	16 784.75	**16 785 – 16 804** 39 f. 0.5 kHz	16 804.25	**16 804.5 – 16 806** 4 f. 0.5 kHz	16 806.25	16 806.25	**16 806.5 – 16 902.5** 193 f. 0.5 kHz	16 902.75	**16 903 – 16 904** 3 f. 0.5 kHz	16 904.5		17 242	**17 243.4 – 17 408.4** 56 f. 3 kHz	17 410
18/19	18 870	X	18 870	**18 870.5 – 18 892.5** 45 f. 0.5 kHz	18 892.75	X	18 892.75	X	18 892.75	**18 893 – 18 898** 11 f. 0.5 kHz	18 898.25	**18 898.5 – 18 899.5** 3 f. 0.5 kHz	18 899.75	19 680.25	**19 680.5 – 19 703** 46 f. 0.5 kHz	19 703.25	**19 703.5 – 19 704.5** 3 f. 0.5 kHz	19 705		19 755	**19 756.4 – 19 798.4** 15 f. 3 kHz	19 800
22	22 284.25	X	22 284.25	**22 284.5 – 22 351.5** 135 f. 0.5 kHz	22 351.75	X	22 351.75	X	22 351.75	**22 352 – 22 374** 45 f. 0.5 kHz	22 374.25	**22 374.5 – 22 375.5** 3 f. 0.5 kHz	22 375.75	22 375.75	**22 376 – 22 443.5** 136 f. 0.5 kHz	22 443.75	**22 444 – 22 445** 3 f. 0.5 kHz	22 445.5		22 696	**22 697.4 – 22 853.4** 53 f. 3 kHz	22 855
25/26	25 172.75	X	25 172.75	**25 173 – 25 192.5** 40 f. 0.5 kHz	25 192.75	X	25 192.75	X	25 192.75	**25 193 – 25 208** 31 f. 0.5 kHz	25 208.25	**25 208.5 – 25 209.5** 3 f. 0.5 kHz	25 210	26 100.25	**26 100.5 – 26 120.5** 41 f. 0.5 kHz	26 120.75	**26 121 – 26 122** 3 f. 0.5 kHz	26 122.5		26 145	**26 146.4 – 26 173.4** 10 f. 3 kHz	26 175

f. = fréquences/frequencies/frecuencias


NCA
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GROENLAND
ÉTATS-UNIS D'AMÉRIQUE
OCÉAN PACIFIQUE DU NORD
OCÉAN PACIFIQUE DU SUD
OCÉAN ATLANTIQUE DU NORD
OCÉAN ATLANTIQUE DU SUD
OCÉAN INDIEN
UNION DES RÉPUBLIQUES SOCIALISTES SOVIÉTIQUES
MEXIQUE
BRÉSIL
ARGENTINE
CHILI
PÉROU
BOLIVIE
COLOMBIE
VENEZUELA
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MAURITANIE
MALI
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ÉTHIOPIE
NIGERIA
ZAÏRE
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BOTSWANA
TANZANIE
KENYA
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MOZAMBIQUE
MADAGASCAR
RÉPUBLIQUE SUDAFRICAINE
ARABIE SAOUDITE
IRAN
IRAQ
SYRIE
TURQUIE
AFGHANISTAN
PAKISTAN
INDE
CHINE
MONGOLIE
BIRMANIE
THAÏLANDE
MALAISIE
INDONÉSIE
PHILIPPINES
JAPON
AUSTRALIE
NOUVELLE-ZÉLANDE
FRANCE
ESPAGNE
POLOGNE
UKRAINE
ROUMANIE
FINLANDE
SUÈDE
NORVÈGE
ISLANDE
ROYAUME-UNI
IRLANDE
Long. Ouest
Méridien 0° de Gr.
Long. Est

CARTE 1 ZONES DE PASSAGE DES LIGNES AÉRIENNES MONDIALES PRINCIPALES

MAP 1 MAJOR WORLD AIR ROUTES AREAS

MAPA 1 ZONAS DE PASO DE RUTAS AÉREAS MUNDIALES PRINCIPALES

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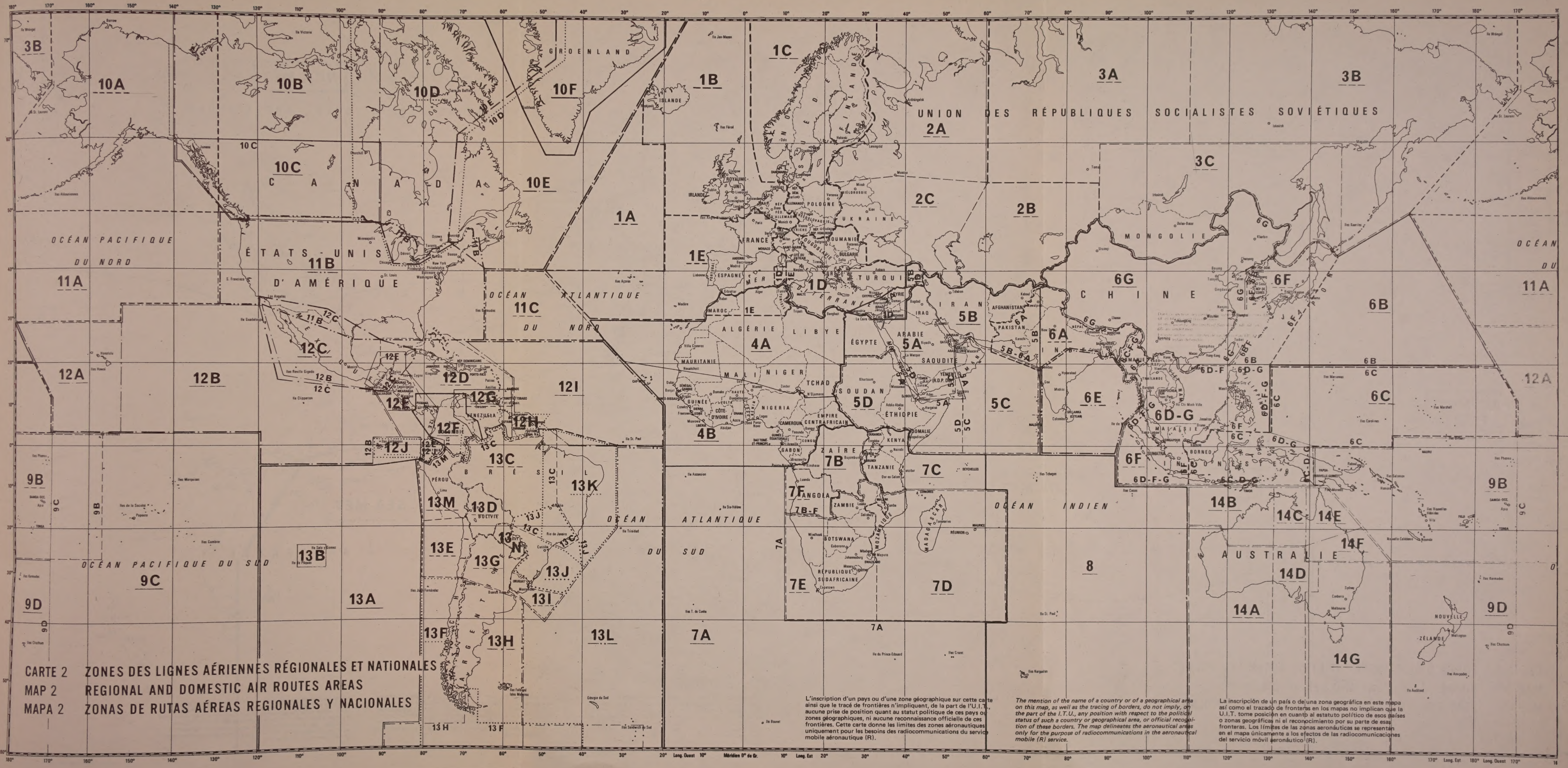
3B
10A
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10D
10E
10F
GROENLAND
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1C
ISLANDE
10C
C A N A D A
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UNION DES RÉPUBLIQUES SOCIALISTES SOVIÉTIQUES
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11C
OCÉAN ATLANTIQUE DU NORD
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1D
MER MÉDITERRANÉE
IRAN
IRAQ
5B
AFGHANISTAN
PAKISTAN
6A
6G
CHINE
6F
6B
11A
OCÉAN
12A
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ÉTHIOPIE
NIGERIA
EMPIRE CENTRAFRICAIN
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6D-G
6D-F-G
6C
VENEZUELA
PÉROU
BRÉSIL
BOLIVIE
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13N
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9C
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OCÉAN PACIFIQUE DU SUD
ZAÏRE
KENYA
TANZANIE
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7F
ANGOLA
ZAMBIE
7B-F
BOTSWANA
RÉPUBLIQUE SUDAFRICAINE
7A
7D
7E
MADAGASCAR
OCÉAN ATLANTIQUE DU SUD
OCÉAN INDIEN
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14C
14D
14E
14F
14G
AUSTRALIE
NOUVELLE-ZÉLANDE
ARGENTINE
CHILI
Long. Ouest
Méridien 0° de Gr.
Long. Est

CARTE 2 ZONES DES LIGNES AÉRIENNES RÉGIONALES ET NATIONALES
MAP 2 REGIONAL AND DOMESTIC AIR ROUTES AREAS
MAPA 2 ZONAS DE RUTAS AÉREAS REGIONALES Y NACIONALES

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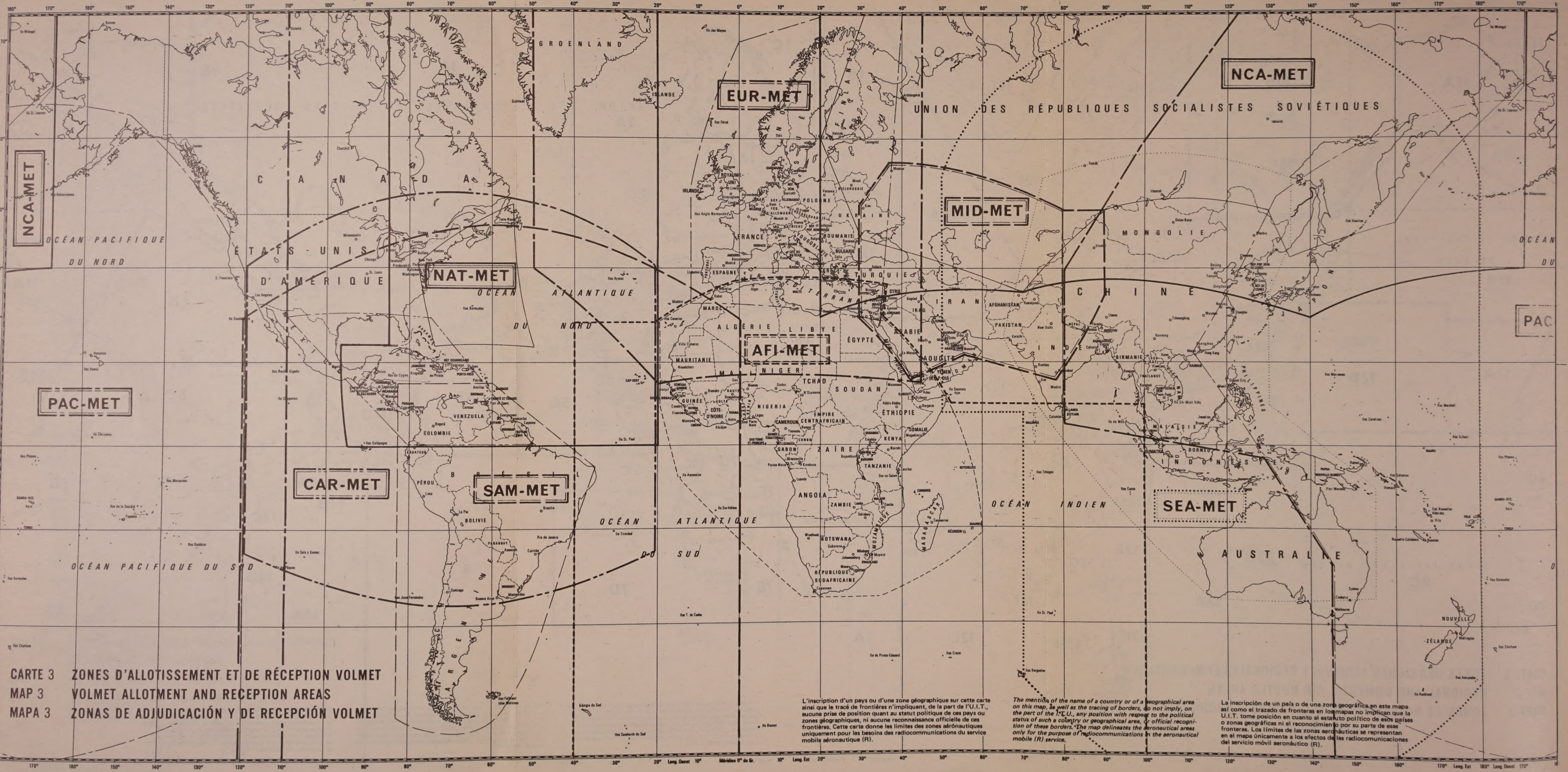
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CAR-MET
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SAM-MET
EUR-MET
AFI-MET
MID-MET
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PAC
GROENLAND
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OCÉAN PACIFIQUE DU SUD
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CARTE 3 ZONES D'ALLOTISSEMENT ET DE RÉCEPTION VOLMET
MAP 3 VOLMET ALLOTMENT AND RECEPTION AREAS
MAPA 3 ZONAS DE ADJUDICACIÓN Y DE RECEPCIÓN VOLMET

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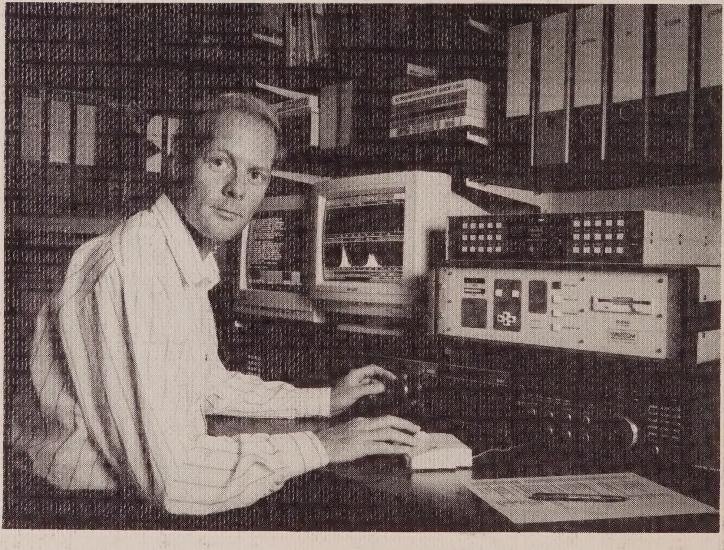

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